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Prepared for:
**BFI Waste Systems of North America, LLC**
**Hanover Park, Illinois**

# Supplemental Work Plan
# Mallard Lake Landfill

AECOM, Inc.
August 2009
**Document No.: 13069-002**

AECOM

AECOM

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August 7, 2009

Mr. Steve Faryan
On-Scene Coordinator
US Environmental Protection Agency
Region 5
77 West Jackson Boulevard
Chicago, Illinois 60604-3590

**Subject: EPA Docket No. 7003-5-08-001**
**Supplemental Work Plan**
**Mallard Lake Landfill, Hanover Park, Illinois**
**AECOM Project No. 13069-002**

Dear Mr. Faryan,

This submittal completes the requirements of providing a Work Plan to address the US EPA letter dated July 22, 2009, regarding the need for additional items required under the RCRA Section 7003 Administrative Order on Consent (AOC) dated December 4, 2007, issued to BFI Waste Systems of North America and the Forest Preserve District of DuPage County (the Respondents). This submittal is intended to address the additional items requested concerning the perimeter probe methane concentrations recorded during the execution of the Corrective Action Plan (CAP).

The Work Plan addresses the following items outlined in the US EPA July 22, 2009, letter:

1(a) Evaluate the entire landfill gas system, which is described for this submittal as portions of the active gas extraction system that are installed within the limit of waste.

1(b) Characterize the nature and extent of contamination on the east side probe GMP-H and west side Probes GMP-D and P2-C.

1(c) eliminate the methane concentrations around the entire perimeter of the site, including a detailed implementation schedule for the task.

In addition to these requests in the letter, several additional items were requested in a conference call and confirmed in a letter from AECOM, Inc. (AECOM) to US EPA dated July 29, 2009. These additional items are:

1. US EPA would like to have an engineer accompany the technician on the next round of well monitoring. This request was transmitted to the Fortistar technician and arrangements have been made to have the engineer accompany him on the August 2009 monitoring round.
2. US EPA asked for the Work Plan to address the potential for landfill gas to migrate along the gas head pipe in areas that are bedded with granular material. This has been added to the Work Plan.
3. US EPA asked about the status of the blower replacement and rebuild for the flares at the site. This work was completed in 2008 and reported in the "Evaluation of Remedial Activities" report submitted July 15, 2009, to IEPA and US EPA.

This investigation and plan will be performed under the health and safety plan and the quality assurance plan developed for the original Work Plan dated December 6, 2007.

If there are any questions or comments, please contact Mr. Michael Ruetten or Mr. Steven Kornder of AECOM at 800.949.1978.

Sincerely,

Steven C. Kornder, Ph.D.
Senior Geochemist

Michael G. Ruetten, P.E.
Principal Engineer

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# 1.0 Introduction

This Work Plan is prepared in response to a letter dated July 22, 2009, from US EPA to BFI Waste Systems of North America, LLC (BFI) and the Forest Preserve District of DuPage County concerning the detection of methane at perimeter probes at the Mallard Lake Landfill.

The following points are provided so that each party has an equal understanding to the comments in the letter:

- Paragraph 1 stated that "two deep wells" were installed. During the 2008 maintenance and repair program, ten new wells (P-302 through P-311) were installed with deep screened sections, ten replacement wells were installed in 2008, and seven replacement wells were installed in 2009.
- The probes have at least two names or designations used by the gas plant and AECOM, Inc. (AECOM) is performing the monitoring. Here are the equal designations that have been used on site maps and previously reported data: GMP-D and GP-D; GMP-E and GP-E; GMP-E1 and E-1; GMP-H and GP-H.
- The data stated in the letter is from the May 2009 monthly sampling of the landfill. Since that time, additional data has been submitted in the Evaluation of Remedial Activities (ERA). AECOM has also taken additional readings at some of the probes in response to the supplemental extraction with hoses at nearby probes. Data for the probes stated in the letter since June 1, 2009, is included with this letter for your review. These show significant responses to recent activities.

In addition to the information in the letter, US EPA requested the following items during a conference call on July 27, 2009:

1. US EPA would like to have an engineer accompany the next well field monitoring event. BFI will contact the gas plant and get the schedule. This activity is being coordinated outside of this Work Plan.
2. US EPA also asked if the Work Plan can address the potential for gas movement along the header system for the active gas extraction system due to granular pipe bedding. A section is in this Work Plan to address this potential.
3. US EPA asked about the status of the blowers for the flare at the site. As reported, there is a new blower and a rebuilt blower at the site. The report on this replacement is included in the recently submitted ERA report submitted to US EPA and IEPA on July 15, 2009. Further review of the blower/flare is not included in this Work Plan.
4. IEPA asked about the reporting of perimeter probe methane concentrations when they are above 2.5% and about the submittal of a sig. mod. related to the readings. This activity is being coordinated outside of this Work Plan.

## 1.1 Supplemental Activities

In addition to the extraction of methane at the large diameter wells, supplemental extraction has been implemented on the project at the following probes:

CP-1, CP-2, CP-8, CP-9, CP-13, CP-26, CP-47, GPT-11, GPT-12, and GX-15

These activities, as originally discussed in the Corrective Action Plan (CAP), have had an immediate impact on several of the perimeter probes mentioned in the US EPA letter. The data for the probes that have been monitored as part of the CAP are included in Appendix A. There has been a direct correlation between the

hose extraction at CP-8 and Probe GMP-15. There is also a direct response between extraction at GPT-11 and GP-H. This Work Plan addresses these responses and provides an action plan for these areas.

## 1.2 Recent Investigations

A cone penetrometer study was completed in June 2009 along the west side of the landfill, near GP-H and several locations along the south limits of the landfill. This data along with the data from the original nature and extent report is discussed in Section 2.0. The rig advanced soundings for the determination of geologic units at several locations. Figures 1, 2, and 3 show the locations of the soundings and three locations that were converted into probes.

Additional soundings were also conducted in Hawk Hollow in association with methane detected in geotechnical borings for a pedestrian bridge over County Farm Road west of the landfill. These borings along County Farm are discussed in Section 2.0. Additional soundings and probes were also installed near the ML-6 area northeast of the landfill and are discussed in Section 2.0.

# 2.0 Scope of Work

## 2.1 Data Sources

During the Nature and Extent investigation and ongoing during corrective actions, perimeter monitoring probes for the landfill have been monitored using a Land Tec GEM 90 or 500. These instruments are calibrated daily and used to record the static pressure, methane, oxygen, carbon dioxide, and balance gas concentrations by volume. This data for probes that have had methane during the investigation and corrective action is included in Appendix A.

In addition to the monitoring preformed by AECOM, Fortistar performs monthly monitoring at the perimeter monitoring probes as part of the IEPA permit requirements. A summary of this data is included in Appendix B.

Based on this data, the following probes have had methane in exceedance of 2.5% by volume since November 2007:

P6B, GMP-13, GMP-14, GMP-15, GMP-17,GP-V, GP-D, GP-U, GP-C, GP-H, E-1, and GP-E

Two of these probes, GP-E and E-1, are currently used for active extraction of gas and connected to the landfill gas header system. This is in accordance with the CAP.

Recent data shows the following probes have responded to the CAP activities and are in compliance:

GMP-13, GMP-15, GP-C, GP-H, GP-U, P6B, and GP-V

The following probes currently have methane above 2.5% by volume:

GMP-14, GMP-17, and GP-D

A review of the data collected by Fortistar during monthly monitoring events of the perimeter probes show the same trends and compliance information. See Appendix B for the monthly data for November 2007 to July 2009 from the Fortistar monitoring. This monitoring is performed in compliance with the landfill permit.

## 2.2 Data Evaluation

Data obtained from the monitoring probes will be statistically analyzed to determine if trends in the data are valid. In addition, the probe will be compared to activities adjacent to the probe to determine if there is a statistical correlation to the vacuum generated by remediation activities, water levels, or active gas system changes. There are several probes that have demonstrated a clear influence to remediation activities such as CP-8 to GMP-15; however, the other relationships will be evaluated.

This evaluation will determine if the sampling frequency is sufficient and if there are correlations that have not been recognized with the routine data review.

## 2.3 Gas Plant Operation Review

The operational data from the gas plant was reviewed as part of the actions performed under the 2008 gas system evaluation. Data from the gas plant will be obtained and reviewed to determine what changes in methane concentration, flows, or vacuums occurred in 2008 and 2009 to determine if the probes have responded to these changes. For example, the GPT probes installed as part of the Nature and Extent

investigation, which were monitored as part of the potential subsurface oxidation event at EW-231, are now in compliance since the wells were turned back on.

## 2.4 Active System Evaluation

The July 22, 2009, letter requested that every well and penetration on the landfill be reviewed. Data such as: well condition, depth, surface elevation, water level, screen interval, extraction rate, methane, oxygen, carbon dioxide, and temperature pressure should be obtained. This information currently exists for the site wells. Appendix C contains a 2006 list of wells and installed information such as well pipe material, depth, and screen interval. The monthly monitoring information obtained by Fortistar in accordance with the site air permit includes gas temperature, pressure/vacuum, flow, and concentration by volume for methane, oxygen, carbon dioxide, and balance gas. In addition, the well condition is reported. Therefore, the scope under this Work Plan will include obtaining this gas flow-related information that is a continuation of the data reviewed in 2008. The data will be compared to the well installation data and field notes to see if there are any construction-related impacts.

Information from the 2009 gas system repair and maintenance activities will be obtained and reviewed. BFI had the site flown and mapped in 2009. This map will be used to compare the surface elevation of the wells to current conditions. This map will also be compared to the 2005 site map to evaluate the rate of consolidation or settlement that may have occurred at the landfill.

The following scope items will be performed to address the review of the active gas extraction system.

BFI/Allied performed an evaluation of the Mallard Lake Landfill gas system and submitted the results of that analysis to the US EPA in a report titled, "Evaluation of Landfill Gas Extraction System Operating Data" dated April 30, 2008. That evaluation addresses many of the items listed in item 1a of the July 22, 2009, US EPA letter, including:

- Current operational data on all (landfill gas) extraction wells
- Condition of all (landfill gas) extraction wells
- (Landfill gas) extraction rate
- (Landfill gas) methane level
- (Landfill gas) oxygen level
- (Landfill gas) carbon dioxide level
- (Landfill) gas temperature
- Pressure (applied to each landfill gas well
- Condition of (landfill) cover around each (landfill gas) well

The information listed above covered the period September 2006 through December 2007. This information is collected on a monthly basis by GRS/Fortistar.

The Work Plan will update the well information for the 2008 and 2009 installations regarding the following parameters:

- (As installed landfill gas)New well depth.
- Depth to waste (final cover thickness) at each (landfill gas) new well.
- (As installed landfill gas well) screen interval for new wells.
- (As installed landfill gas well) screen depth on new wells.
- Settlement areas (on the landfill).
- The condition of each (landfill gas) extraction well seal (please see the note in the following paragraph).
- Historical (as installed) and current surveyed elevation data for all (landfill gas) extraction wells at (or near) the top of the casing and at ground surface. (Landfill gas well head elevations are often surveyed on a flange bolt or top of fitting, rather than at the top of the casing pipe. As long as the location is clearly noted in the survey data, it can be accurately re-surveyed.)
- The date of historical and current data sets will be provided with the data.

The above information will be provided in an update to the 2008 landfill gas system evaluation report. The report will include copies of the data, an evaluation of the updated data, and conclusions drawn from the updated data.

In the 2008 report referenced earlier, an evaluation of the condition of the well seals at the landfill gas wells based on operating data was provided. Based on experience with landfill gas collection systems and final cover systems, this is believed to be the safest means of conducting an evaluation of these seals. Excavating the seals to inspect their integrity essentially destroys the seals and risks causing substantial damage to the geomembrane component of a composite final cover system.

Additional data (i.e. televising of lines or measurements taken by BFI in maintenance of the condensate system or leachate extraction devices in the wells) will be reviewed and reported.

## 2.5 Characterize the Nature and Extent of Methane Near GP-H

Figure 3, "Supplemental Work Plan, On-site Investigation Area, East Side," shows existing conditions adjacent to Probe GP-H. The landfill is to the west of the probe and several lakes extend to the east and south. There is low vegetation and gently sloping land to the north. Figure 3 shows the area has already been investigated in the original Nature and Extent investigation and the recent June cone rig soundings. Probe GPT-11 is the most recent in the area and the only one with methane based on recent readings (see Table 1). The June monitoring by Fortistar reported GPT-5 and GPT-6 as no methane and Probe GP-H as no methane (see Table 2, Fortistar June 2009 monitoring).

Probe GPT-11 was installed in June 2009 and completed after the cone rig sounding. The probe depth is approximately 18 feet with several feet of apparent vadose zone. The surface elevation of the probe is approximately +780 feet, while the adjacent lakes to the east and south are approximately +769 feet and +762 feet for water elevations. Therefore, the bottom of the probe corresponds to the water elevation in lakes.

The extent of the potential methane migration has been investigated; data from the last cone rig investigation along with the recent gas recovery efforts in the area will be evaluated under this Work Plan. This data will be reviewed in conjunction with the past performance of GP-H, which has returned to compliance in the past only under the operation of the active gas extraction system.

Consistent with the CAP, if the data reveals that a well or other additional actions are needed in this area, a design will be prepared and implemented.

## 2.6 Characterization of the Nature and Extent of Methane Near Probe GMP-D

Figure 1, "Supplemental Work Plan On-Site Investigation Area, West Side," shows the existing conditions in the area around GP-D. During the initial Nature and Extent investigation for the site, GPT-3 was installed south of GP-D and several probes were installed approximately 500 to 750 feet to the west in Hawk Hollow. Subsequently, an additional probe, RW-29, was placed approximately 200 feet to the west of GP-D. During the recent cone rig soundings in June 2009, nine additional soundings were completed immediately to the east of GP-D and extending 150 south and 600 to 700 feet to the north.

Methane concentrations in GP-D have recently been above 2.5%, but have been in compliance in past readings at the probes. Methane concentrations at GMP-17 to the south and GP-V to the north have fluctuated during monitoring of the CAP from compliance to non-compliance. RW-21 and RW-29 have not had methane detections during the monitoring events associated with the CAP. During the cone rig soundings, methane was detected in the open borehole at CPT-OSN2 and CPT-OSN4, both are north and east of GP-D. A probe was installed in CPT-OSN2 and is labeled GPT-12. Gas has been detected in GPT-12 monitoring after installation.

Therefore, the extent of the potential methane migration has been investigated and data from the recent cone rig sounds will be reviewed in conjunction with recently attempted hose extraction at GPT-12. Data corresponding to the past when GP-D was in compliance will be reviewed to determine if there is a correlation to the water table in the area or active gas system maintenance..

Consistent with the CAP, if the data reveals that an additional action is needed in this area, a design will be prepared and implemented.

## 2.7 Characterization of the Nature and Extent of Methane Near P-2C

Figure 1 shows the existing conditions in the area around P-2C. During the initial Nature and Extent investigation for the site, CP-12 was installed approximately 150 feet northwest of P-2C. During the June 2009 cone rig soundings, eight sounding were conducted to the east of P-2C and extended approximately 200 feet south and 300 feet north. Existing groundwater and trench wells in the area include W-19 and W-22 to the east.

Methane has not been detected above 1% by volume at the other probes at P-2 during the monthly sampling performed under the landfill permit in the period of 2000 to 2009. During the cone soundings, three locations had methane detections in the open borehole: CPT-OS3A, -4A and -5. These cone soundings were extended to 63, 54, and 54 feet below grade, respectively.

Therefore, the extent of the potential methane migration has been investigated and data from the recent cone rig sounds will be reviewed in conjunction with recently attempted hose extraction at CP-1 and CP-2. Data corresponding to the past when P-2C was in compliance will be reviewed to determine if there is a correlation to the water table in the area or active gas system maintenance.

Consistent with the CAP, if the data reveals that an additional action is needed in this area, a design will be prepared and implemented..

## 2.8 Existing Probes Being Used for Extraction

Perimeter monitoring Probes GP-E and E-1, which are part of the landfill perimeter monitoring system under the current permit, are used for active extraction under the approval of the CAP. The extraction of gas from these locations is anticipated to continue while the methane concentrations exceed compliance.

Probe GX-9, which was installed as part of the original Nature and Extent investigation, is also used for active extraction. This location is piped to the active gas extraction system header along with piping from LDE-6 and GP-E.

During the June 2009 cone rig soundings, three sounding were conducted on the south side of the landfill as shown on Figure 2, "Supplemental Work Plan On-Site Investigation Area, South Side": CPT-OSS1, CPT-OSS2, and GX-15. The sounding at GX-9 was converted to a probe for potential methane recovery and monitoring.

Methane readings at GP-E and E-1 have been fairly consistent above 2.5% methane since they are connected to active extraction as part of the remediation efforts. GX-9 originally had high positive pressure and methane concentrations. By being connected to the extraction system, the methane concentrations have fallen slightly and the pressure is generally a vacuum.

The recent data from the cone rig investigation and probe data will be reviewed to determine if additional measures can be preformed at these probes. A request has been made to US EPA to allow the shut-down of the extraction and pumping at TW-1, which is south of E-1. It is believed that letting the vadose zone past E-1 fill in with water and stopping the extraction will make extraction on E-1 and GWM-10 and -11 more effective in recovery and control of methane. If this method is successful, continued extraction at E-1 may not be needed. The data will be reviewed to determine if any additional measures are needed at E-1 and GP-E areas.

## 2.9 Header System Bedding

The documentation data and photographs from the header construction and repairs will be reviewed to determine if the types of backfill on the header can be determined. Some field evidence exists that shows some of the piping is bedded in sand. In addition, there is some extraction at specific locations on the landfill where a pipe is extracting gas from the bedding. The data will be reviewed to determine if the methane can migrate along the header without being impacted by the existing wells or extraction points.

If additional extraction or seals are needed along the header, a design will be developed to collect gas while minimizing the intake of air into the landfill. Any extraction will be connected to the existing header system for control.

## 2.10 Blower and Flare

The blower and flare facility was evaluated in 2008. The evaluation recommended cleaning of flare components, installation of a new blower, a potential rebuilding of one of the existing blowers, and retesting to evaluate the piping capacity. This work was completed in 2008. A copy of the report by Cornerstone is included in the Evaluation of Remedial Actions dated July 15, 2009. No additional evaluation of the blower and flare is included in this scope.

## 2.11 Perimeter Methane Concentrations

The intent of the CAP and operation of the active gas extraction system is to maintain compliance with applicable rules and regulations under federal and state authorities. While the goal of the CAP and operation of the gas extraction system is to eliminate methane detection at the perimeter of the landfill and prevent future migrations, the definition of compliance in the CAP is stated as:

1. Stop any current and prevent future LFG from migration beyond the property boundary or over 100 feet from the limits of waste (whichever is less) as demonstrated by methane levels of 50% LEL (2.5% by volume) or less at the existing permitted landfill gas monitoring probes.
2. Remediate LFG having methane content greater than 50% of the LEL in air that may have migrated beyond the property boundary or the existing permitted landfill gas monitoring probes.

The activities engaged to date have shown progress in achieving this goal as revealed by the probes that have returned to compliance (refer to Appendices A and B.). The CAP presented that the activities would proceed in a phased approach so as not to conflict with one another, such as off-site extraction limiting on-site recovery.

Therefore, the request in the July 22, 2009, letter to "c) eliminate the methane concentrations around the entire perimeter of the site, including a detailed implementation schedule for each task" is not in accordance with the CAP. The following section provides a schedule for the review of existing and new data. This review will be presented in a summary report that contains recommended actions or construction. It is proposed that this supplemental Work Plan complete the stated scope items and comply with the CAP provisions.

# 3.0 Schedule

The schedule for the scope of work has already commenced. The cone rig soundings performed in June 2009 have advanced the nature and extent data for the requested areas. The work is intended to meet the following dates for completion:

| Activity | Date |
|---|---|
| Authorization | August 10, 2009 |
| Review of gas system | Begin August 10, 2009 |
| Complete data on GP-H, GP-V, and P-2C | September 1, 2009 |
| Complete gas system review | September 10, 2009 |
| Complete review of GP-E, E-1, and GX-9 | September 10, 2009 |
| Submit report and recommendations | September 24, 2009 |
| Implement approved actions | Begin October 1, 2009 |

# 4.0 Reporting

During performance of the scope of work, the status of each activity will be reported as part of the site status meetings. These are generally every two to three weeks. A written status report on the information gathered will be provided on September 10, 2009, and preliminary plan of actions will be discussed. It is anticipated that a meeting on the proposed actions will be scheduled between September 10, 2009, and submittal of the report.

# Appendix A

## Active Extraction Probes

## Probes with Exceedances and Now in Compliance

## Probes with Exceedances

# Active Extraction Probes

## Mallard Lake

| Probe | Date | Static Pressure (inches H2O) | Methane (%) | Carbon Dioxide (%) | Oxygen (%) | Balance Gas (%) | Depth to Water (bMV) | Elevation of Groundwater Surface (ft MSL) | Qualifier |
|---|---|---|---|---|---|---|---|---|---|
| E-1 | 5/1/2008 | 0.8 | 66.7 | 28.9 | 0.3 | 4.0 | 43.35 | 763.45 | |
| E-1 | 5/6/2008 | 1.2 | 69.4 | 29.1 | 0.3 | 1.2 | 43.68 | 763.12 | |
| E-1 | 5/13/2008 | 1.0 | 70.3 | 29.0 | 0.1 | 0.5 | 43.71 | 763.09 | |
| E-1 | 5/28/2008 | 4.1 | 66.7 | 31.6 | 0.2 | 0.9 | 44.95 | 761.85 | |
| E-1 | 6/3/2008 | 1.5 | 68.1 | 31.5 | 0.2 | 0.0 | 44.77 | 762.03 | |
| E-1 | 6/10/2008 | 1.5 | 68.1 | 30.8 | 0.3 | 0.5 | 45.08 | 761.72 | |
| E-1 | 6/16/2008 | 1.7 | 66.9 | 31.2 | 0.4 | 1.6 | 45.15 | 761.65 | |
| E-1 | 6/23/2008 | 0.4 | 34.4 | 15.5 | 9.8 | 40.0 | 45.54 | 761.26 | |
| E-1 | 7/1/2008 | 1.4 | 55.8 | 25.0 | 3.5 | 15.7 | 45.76 | 761.04 | |
| E-1 | 7/8/2008 | 1.8 | 67.0 | 29.7 | 0.2 | 3.1 | 45.83 | 760.97 | |
| E-1 | 7/14/2008 | 1.4 | 67.0 | 29.5 | 0.0 | 3.5 | 45.98 | 760.82 | |
| E-1 | 7/29/2008 | 1.5 | 66.3 | 29.6 | 0.3 | 3.8 | 46.27 | 760.53 | |
| E-1 | 8/5/2008 | 1.8 | 67.5 | 29.8 | 0.3 | 2.5 | 46.47 | 760.33 | |
| E-1 | 8/19/2008 | 1.6 | 65.7 | 29.5 | 0.3 | 4.6 | 46.82 | 759.98 | |
| E-1 | 8/25/2008 | 1.4 | 68.3 | 29.5 | 0.0 | 2.0 | NM | NM | |
| E-1 | 8/26/2008 | -19.0 | 13.0 | 5.6 | 16.7 | 64.7 | NM | NM | Undergoing vaccum extraction |
| E-1 | 8/27/2008 | -21.0 | 11.3 | 4.8 | 17.2 | 66.8 | NM | NM | Undergoing vaccum extraction |
| E-1 | 8/28/2008 | -21.3 | 9.2 | 4.0 | 17.8 | 69.0 | NM | NM | Undergoing vaccum extraction |
| E-1 | 8/29/2008 | -17.5 | 8.5 | 3.6 | 17.6 | 70.3 | NM | NM | Undergoing vaccum extraction |
| E-1 | 9/2/2008 | -13.7 | 17.0 | 7.6 | 15.0 | 60.3 | NM | NM | Undergoing vaccum extraction |
| E-1 | 9/3/2008 | -15.5 | 14.8 | 6.2 | 16.8 | 62.1 | NM | NM | Undergoing vaccum extraction |
| E-1 | 9/5/2008 | -23.0 | 11.3 | 4.6 | 17.5 | 66.5 | 44.29 | 762.51 | Undergoing vaccum extraction |
| E-1 | 9/9/2008 | -25.0 | 14.0 | 6.0 | 17.1 | 63.0 | 44.42 | 762.38 | |
| E-1 | 9/15/2008 | -15.7 | 14.6 | 5.9 | 16.8 | 62.6 | NM | NM | Undergoing vacuum extraction |
| E-1 | 9/23/2008 | -17.3 | 19.2 | 8.2 | 15.1 | 57.5 | 44.64 | 762.16 | |
| E-1 | 9/26/2008 | -12.6 | 21.4 | 9.5 | 13.7 | 55.4 | 44.84 | 761.96 | Flow set to 25 SCFH |
| E-1 | 10/6/2008 | -38.2 | 20.1 | 8.6 | 14.8 | 56.6 | 43.53 | 763.27 | |
| E-1 | 10/17/2008 | -21.0 | 32.7 | 14.9 | 10.6 | 41.7 | 44.55 | 762.25 | |
| E-1 | 10/24/2008 | -28.1 | 32.0 | 14.8 | 10.2 | 42.8 | NM | NM | Permenantly connected to gas extraction system |
| E-1 | 10/31/2008 | -8.3 | 39.2 | 18.4 | 7.9 | 34.2 | 45.40 | 761.40 | |
| E-1 | 11/18/2008 | -17.4 | 38.9 | 18.4 | 8.2 | 34.2 | 44.84 | 761.96 | |
| E-1 | 12/2/2008 | -10.0 | 57.1 | 26.1 | 4.5 | 12.2 | 44.43 | 762.37 | |
| E-1 | 12/16/2008 | -60.8 | 0.0 | 0.1 | 19.8 | 80.1 | 42.92 | 763.88 | |
| E-1 | 1/9/2009 | -8.4 | 31.1 | 14.3 | 11.3 | 43.2 | 43.85 | 762.95 | |
| E-1 | 1/26/2009 | 12.5 | 73.8 | 26.2 | 0.0 | 0.0 | 45.58 | 761.22 | |
| E-1 | 2/17/2009 | 7.1 | 72.7 | 27.3 | 0.0 | 0.0 | 44.48 | 762.32 | |

# Active Extraction Probes

## Mallard Lake

| Probe | Date | Static Pressure (inches H2O) | Methane (%) | Carbon Dioxide (%) | Oxygen (%) | Balance Gas (%) | Depth to Water (bMV) | Elevation of Groundwater Surface (ft MSL) | Qualifier |
|---|---|---|---|---|---|---|---|---|---|
| E-1 | 3/2/2009 | -12.2 | 44.7 | 21.4 | 6.3 | 27.6 | 47.08 | 759.72 | |
| E-1 | 3/16/2009 | -65.3 | 25.9 | 13.0 | 12.8 | 48.3 | 40.92 | 765.88 | |
| E-1 | 4/7/2009 | -38.1 | 23.6 | 10.8 | 13.2 | 52.4 | 42.39 | 764.41 | |
| E-1 | 4/20/2009 | -32.8 | 33.1 | 16.1 | 10.0 | 40.3 | 42.72 | 764.08 | |
| E-1 | 4/29/2009 | -0.8 | 67.1 | 29.7 | 2.0 | 1.4 | 44.82 | 761.98 | |
| E-1 | 5/4/2009 | 6.7 | 67.9 | 29.9 | 0.0 | 2.2 | 45.87 | 760.93 | |
| E-1 | 5/8/2009 | 15.6 | 66.4 | 30.5 | 0.5 | 2.7 | NM | NM | |
| E-1 | 5/18/2009 | 19.0 | 67.2 | 29.3 | 0.0 | 3.5 | 47.45 | 759.35 | |
| E-1 | 6/9/2009 | -61.5 | 47.5 | 23.1 | 5.7 | 23.6 | 42.54 | 764.26 | |
| E-1 | 6/16/2009 | -74.8 | 40.1 | 19.4 | 6.5 | 34.0 | NM | NM | |
| E-1 | 6/30/2009 | -70.7 | 43.4 | 20.4 | 6.4 | 29.8 | 43.00 | 763.80 | |
| E-1 | 7/13/2009 | -87.2 | 10.5 | 4.5 | 17.3 | 67.7 | NM | NM | |
| E-1 | 7/24/2009 | -74.8 | 44.0 | 22.0 | 6.1 | 28.2 | 42.30 | NM | |
| E-1 | 7/25/2009 | -73.7 | 45.1 | 22.3 | 6.1 | 26.5 | NM | NM | |
| E-1 | 7/26/2009 | -74.9 | 44.7 | 21.5 | 6.8 | 27.0 | NM | NM | |
| E-1 | 7/27/2009 | -56.8 | 24.1 | 11.6 | 12.7 | 51.4 | NM | NM | |
| E-1 | 7/28/2009 | -73.4 | 47.6 | 22.8 | 5.7 | 23.9 | 42.10 | 764.70 | |
| GP-E | 3/21/2008 | 9.3 | 79.4 | 14.7 | 0.4 | 5.7 | NM | NM | |
| GP-E | 3/24/2008 | 8.1 | 74.7 | 14.4 | 1.8 | 9.1 | NM | NM | |
| GP-E | 3/27/2008 | 81.2 | 87.5 | 12.3 | 0.2 | 0.0 | NM | NM | |
| GP-E | 4/3/2008 | 145.8 | 90.3 | 9.7 | 0.0 | 0.0 | NM | NM | |
| GP-E | 4/9/2008 | 84.2 | 89.3 | 7.6 | 0.3 | 2.8 | NM | NM | |
| GP-E | 4/14/2008 | 144.4 | 94.3 | 5.7 | 0.0 | 0.0 | NM | NM | |
| GP-E | 4/17/2008 | 110.6 | 96.1 | 3.9 | 0.0 | 0.0 | NM | NM | |
| GP-E | 4/22/2008 | 132.4 | 75.6 | 6.9 | 4.9 | 12.6 | NM | NM | |
| GP-E | 4/29/2008 | 84.2 | 80.8 | 7.3 | 2.5 | 9.4 | NM | NM | |
| GP-E | 5/6/2008 | -59.2 | NM | NM | NM | NM | NM | NM | |
| GP-E | 5/28/2008 | -7.6 | 55.6 | 5.9 | 5.7 | 32.6 | 46.39 | No TOC | |
| GP-E | 6/3/2008 | -8.0 | 7.3 | 0.7 | 18.7 | 73.2 | NM | NM | |
| GP-E | 6/10/2008 | -9.6 | 20.3 | 2.1 | 15.0 | 62.5 | NM | NM | |
| GP-E | 6/16/2008 | -8.9 | 33.2 | 3.4 | 10.6 | 52.7 | 47.50 | No TOC | |
| GP-E | 6/23/2008 | -0.9 | 0.0 | 0.0 | 20.8 | 79.2 | NM | NM | |
| GP-E | 7/1/2008 | -8.6 | 0.0 | 0.0 | 20.9 | 79.1 | NM | NM | |
| GP-E | 7/8/2008 | 5.3 | 5.7 | 2.2 | 14.5 | 77.7 | 46.05 | ND | |
| GP-E | 7/14/2008 | -6.5 | 5.0 | 1.3 | 16.0 | 77.6 | 47.43 | ND | |
| GP-E | 7/29/2008 | 8.7 | 9.5 | 2.1 | 13.3 | 75.1 | 45.67 | ND | |
| GP-E | 8/5/2008 | 0.0 | 0.3 | 0.2 | 20.6 | 78.9 | 46.38 | ND | |

# Active Extraction Probes

## Mallard Lake

| Probe | Date | Static Pressure (inches H2O) | Methane (%) | Carbon Dioxide (%) | Oxygen (%) | Balance Gas (%) | Depth to Water (bMV) | Elevation of Groundwater Surface (ft MSL) | Qualifier |
|---|---|---|---|---|---|---|---|---|---|
| GP-E | 8/19/2008 | 1.8 | 0.0 | 0.1 | 20.6 | 79.3 | 45.98 | ND | |
| GP-E | 8/27/2008 | -29.0 | 0.0 | 0.2 | 20.6 | 79.2 | 49.33 | ND | |
| GP-E | 8/28/2008 | -36.8 | 0.0 | 0.2 | 20.6 | 79.2 | 49.68 | ND | |
| GP-E | 8/29/2008 | -32.0 | NM | NM | NM | NM | 49.43 | ND | Water level only |
| GP-E | 9/5/2008 | -41.2 | 0.0 | 0.2 | 21.0 | 78.8 | 49.73 | ND | |
| GP-E | 9/9/2008 | -46.4 | 0.0 | 0.2 | 21.3 | 78.5 | 49.79 | ND | |
| GP-E | 9/23/2008 | -42.1 | 0.0 | 0.0 | 21.1 | 78.9 | 49.75 | ND | |
| GP-E | 9/26/2008 | 10.0 | 4.2 | 9.9 | 0.0 | 85.9 | 47.23 | ND | |
| GP-E | 10/6/2008 | -37.0 | 0.0 | 0.1 | 20.6 | 79.3 | 49.62 | ND | |
| GP-E | 10/17/2008 | -62.2 | 0.0 | 0.1 | 20.9 | 79.0 | dry to 53.20 | ND | |
| GP-E | 10/31/2008 | -47.4 | 0.0 | 0.2 | 20.7 | 79.1 | 49.85 | ND | |
| GP-E | 11/18/2008 | -48.3 | 5.5 | 0.5 | 19.0 | 75.0 | 49.82 | ND | |
| GP-E | 12/2/2008 | NM | NM | NM | NM | NM | 44.16 | ND | |
| GP-E | 12/16/2008 | -9.7 | 0.0 | 0.0 | 20.8 | 79.2 | 47.86 | 749.62 | |
| GP-E | 1/9/2009 | -13.0 | 0.0 | 0.0 | 20.9 | 79.1 | 47.73 | 749.75 | |
| GP-E | 1/27/2009 | 0.0 | 0.0 | 0.5 | 20.4 | 79.1 | 35.10 | 762.38 | |
| GP-E | 2/17/2009 | -50.6 | 0.0 | 0.0 | 20.5 | 79.5 | 35.75 | 761.73 | |
| GP-E | 3/16/2009 | -77.5 | 4.0 | 0.3 | 19.8 | 75.9 | 39.98 | 757.50 | |
| GP-E | 3/26/2009 | -72.6 | 0.0 | 0.0 | 20.9 | 79.1 | 35.71 | 761.77 | |
| GP-E | 4/3/2009 | -75.7 | 0.0 | 0.0 | 20.2 | 79.8 | 34.71 | 762.77 | |
| GP-E | 4/7/2009 | -80.2 | 0.0 | 0.3 | 20.6 | 79.1 | 33.85 | 763.63 | |
| GP-E | 4/10/2009 | -72.7 | 0.0 | 0.0 | 20.8 | 79.2 | 33.70 | 763.78 | |
| GP-E | 4/14/2009 | -51.5 | 0.0 | 0.1 | 20.6 | 79.3 | 32.55 | 764.93 | |
| GP-E | 4/18/2009 | -40.8 | 58.7 | 8.8 | 5.6 | 27.2 | 46.32 | 751.16 | |
| GP-E | 4/20/2009 | -1.5 | 38.9 | 5.3 | 10.3 | 45.0 | 46.92 | 750.56 | |
| GP-E | 4/29/2009 | -34.6 | 0.0 | 0.0 | 21.0 | 79.0 | 49.25 | 748.23 | |
| GP-E | 5/4/2009 | -45.0 | 0.0 | 0.0 | 20.6 | 79.4 | 49.54 | 747.94 | |
| GP-E | 5/8/2009 | -37.2 | 0.0 | 0.0 | 20.2 | 79.8 | 49.45 | 748.03 | |
| GP-E | 5/22/2009 | NM | NM | NM | NM | NM | NM | NM | |
| GP-E | 5/26/2009 | NM | NM | NM | NM | NM | NM | NM | |
| GP-E | 5/29/2009 | -60.8 | 11.3 | 5.2 | 15.7 | 67.8 | 49.73 | 746.74 | |
| GP-E | 6/2/2009 | -61.2 | 48.0 | 11.6 | 5.8 | 34.6 | 49.78 | 746.69 | |
| GP-E | 6/5/2009 | -60.6 | 3.0 | 1.7 | 19.4 | 75.8 | 49.80 | 747.68 | |
| GP-E | 6/9/2009 | -69.5 | 6.0 | 2.2 | 18.8 | 73.0 | 49.80 | 747.68 | |
| GP-E | 6/12/2009 | -70.6 | 4.8 | 2.0 | 18.5 | 74.4 | 49.70 | 747.78 | |
| GP-E | 6/16/2009 | -63.9 | 18.8 | 6.4 | 13.2 | 61.6 | 49.54 | 747.94 | |
| GP-E | 6/19/2009 | -42.4 | 44.1 | 29.7 | 2.1 | 24.2 | NM | NM | |

# Active Extraction Probes

## Mallard Lake

| Probe | Date | Static Pressure (inches H2O) | Methane (%) | Carbon Dioxide (%) | Oxygen (%) | Balance Gas (%) | Depth to Water (bMV) | Elevation of Groundwater Surface (ft MSL) | Qualifier |
|---|---|---|---|---|---|---|---|---|---|
| GP-E | 6/24/2009 | -66.6 | 56.1 | 16.2 | 4.1 | 23.6 | 49.90 | 747.58 | |
| GP-E | 6/26/2009 | NM | 0.6 | 2.4 | 16.7 | 80.3 | 49.95 | 747.53 | |
| GP-E | 6/30/2009 | -61.2 | 7.5 | 3.5 | 17.1 | 72.3 | 50.26 | 746.21 | |
| GP-E | 7/3/2009 | -69.9 | 6.4 | 4.8 | 17.0 | 71.8 | 49.77 | 747.71 | |
| GP-E | 7/7/2009 | -62.0 | 10.6 | 5.6 | 15.8 | 67.7 | 49.81 | 746.66 | |
| GP-E | 7/10/2009 | -71.4 | 18.8 | 6.8 | 12.7 | 61.7 | 49.87 | 747.61 | |
| GP-E | 7/13/2009 | -81.0 | 12.6 | 2.1 | 17.2 | 67.5 | 50.55 | 745.92 | |
| GP-E | 7/14/2009 | -66.1 | 2.2 | 1.0 | 19.9 | 77.0 | 49.80 | 747.68 | |
| GP-E | 7/21/2009 | -60.2 | 0.0 | 0.0 | 20.7 | 79.3 | 49.80 | 747.68 | |
| GP-E | 7/24/2009 | -69.2 | 4.2 | 1.8 | 18.6 | 76.4 | 49.26 | NM | |
| GP-E | 7/25/2009 | -67.4 | 31.3 | 10.4 | 10.5 | 47.8 | NM | NM | |
| GP-E | 7/26/2009 | -63.1 | 41.0 | 10.9 | 8.9 | 39.2 | NM | NM | |
| GP-E | 7/27/2009 | -56.1 | 26.5 | 20.4 | 9.9 | 83.0 | NM | NM | |
| GP-E | 7/28/2009 | -67.1 | 23.8 | 7.9 | 12.8 | 55.4 | 49.85 | 746.62 | |

# Probes with Exceedances and Now in Compliance

## Mallard Lake

| Probe | Date | Static Pressure (inches H2O) | Methane (%) | Carbon Dioxide (%) | Oxygen (%) | Balance Gas (%) | Depth to Water (bMV) | Elevation of Groundwater Surface (ft MSL) | Qualifier |
|---|---|---|---|---|---|---|---|---|---|
| GMP-13 | 3/19/2008 | 0.0 | 1.6 | 0.1 | 20.3 | 78.5 | NM | NM | |
| GMP-13 | 3/20/2008 | 0.0 | 29.8 | 3.0 | 13.0 | 54.8 | NM | NM | |
| GMP-13 | 3/21/2008 | 4.1 | 81.1 | 7.5 | 0.4 | 11.1 | NM | NM | |
| GMP-13 | 3/24/2008 | 15.3 | 80.5 | 7.4 | 0.2 | 11.9 | NM | NM | |
| GMP-13 | 3/26/2008 | 14.7 | 80.9 | 6.7 | 0.0 | 12.2 | NM | NM | |
| GMP-13 | 4/1/2008 | 15.4 | 81.5 | 6.7 | 0.0 | 11.8 | NM | NM | |
| GMP-13 | 4/4/2008 | 2.1 | 80.2 | 6.7 | 0.4 | 12.8 | 75.69 | 762.21 | |
| GMP-13 | 4/9/2008 | 0.4 | 81.4 | 6.5 | 0.4 | 12.1 | 76.55 | 761.35 | |
| GMP-13 | 4/14/2008 | 0.8 | 79.1 | 6.5 | 0.2 | 14.4 | 76.71 | 761.19 | |
| GMP-13 | 4/16/2008 | 6.1 | 80.2 | 6.4 | 0.3 | 13.2 | 76.22 | 761.68 | |
| GMP-13 | 4/22/2008 | 0.3 | 41.5 | 3.5 | 9.7 | 45.4 | 76.00 | 761.90 | |
| GMP-13 | 4/29/2008 | -3.4 | 0.0 | 0.0 | 20.7 | 79.3 | 77.71 | 760.19 | |
| GMP-13 | 5/6/2008 | 2.6 | 27.3 | 10.7 | 0.2 | 61.7 | 77.52 | 760.38 | |
| GMP-13 | 5/13/2008 | 1.2 | 72.9 | 9.4 | 0.1 | 17.5 | 77.71 | 760.19 | |
| GMP-13 | 5/28/2008 | 0.1 | 0.0 | 0.0 | 20.9 | 79.1 | 77.69 | 760.21 | |
| GMP-13 | 6/3/2008 | 1.7 | 78.3 | 7.5 | 0.4 | 13.9 | 77.48 | 760.42 | |
| GMP-13 | 6/10/2008 | 0.2 | 0.0 | 0.0 | 20.7 | 79.3 | dry to 77.86 | <760.04 | |
| GMP-13 | 6/16/2008 | -19.0 | 0.0 | 0.0 | 20.7 | 79.3 | dry to 77.86 | <760.04 | |
| GMP-13 | 6/23/2008 | -4.0 | 0.0 | 0.0 | 21.1 | 78.9 | dry to 77.86 | <760.04 | |
| GMP-13 | 7/1/2008 | -13.0 | 0.0 | 0.0 | 20.9 | 79.1 | dry to 77.86 | <760.04 | |
| GMP-13 | 7/8/2008 | -17.2 | 0.0 | 0.1 | 20.9 | 79.0 | dry to 77.65 | <760.25 | |
| GMP-13 | 7/14/2008 | -13.8 | 0.0 | 0.1 | 20.8 | 79.1 | dry to 77.65 | <760.25 | |
| GMP-13 | 7/29/2008 | -9.6 | 0.0 | 0.1 | 20.7 | 79.2 | dry to 77.65 | <760.25 | |
| GMP-13 | 8/5/2008 | -17.0 | 0.0 | 0.2 | 20.6 | 79.2 | dry to 77.65 | <760.25 | |
| GMP-13 | 8/19/2008 | -13.8 | 0.0 | 0.1 | 20.4 | 79.5 | dry to 77.67 | <760.23 | |
| GMP-13 | 9/9/2008 | -27.0 | 0.0 | 0.2 | 21.2 | 78.6 | 77.48 | 760.42 | |
| GMP-13 | 9/23/2008 | 5.2 | 62.9 | 14.9 | 0.0 | 22.1 | 77.23 | 760.67 | |
| GMP-13 | 9/26/2008 | 9.6 | 65.3 | 15.0 | 0.0 | 19.7 | 77.15 | 760.75 | |
| GMP-13 | 10/6/2008 | 7.1 | 73.1 | 13.6 | 0.0 | 13.3 | 77.08 | 760.82 | |
| GMP-13 | 10/17/2008 | -3.3 | 0.0 | 0.2 | 21.0 | 78.8 | 77.35 | 760.55 | |
| GMP-13 | 10/31/2008 | -3.7 | 0.0 | 0.1 | 20.7 | 79.2 | 77.72 | 760.18 | |
| GMP-13 | 11/18/2008 | -6.1 | 0.0 | 0.3 | 19.7 | 80.0 | 77.85 | 760.05 | |
| GMP-13 | 12/2/2008 | 1.2 | 61.1 | 10.4 | 1.6 | 26.6 | 77.47 | 760.43 | |
| GMP-13 | 12/10/2008 | 6.9 | 71.1 | 10.6 | 0.4 | 17.9 | 73.50 | 764.40 | |
| GMP-13 | 12/16/2008 | 12.1 | 74.8 | 9.9 | 0.0 | 15.1 | 77.15 | 760.75 | |
| GMP-13 | 1/12/2009 | 2.2 | 30.0 | 3.1 | 12.7 | 54.5 | 74.29 | 763.61 | |
| GMP-13 | 1/27/2009 | 4.6 | 79.0 | 6.5 | 0.4 | 14.1 | 74.70 | 763.20 | |

# Probes with Exceedances and Now in Compliance

## Mallard Lake

| Probe | Date | Static Pressure (Inches H2O) | Methane (%) | Carbon Dioxide (%) | Oxygen (%) | Balance Gas (%) | Depth to Water (bMV) | Elevation of Groundwater Surface (ft MSL) | Qualifier |
|---|---|---|---|---|---|---|---|---|---|
| GMP-13 | 2/2/2009 | 1.6 | 79.5 | 5.7 | 0.0 | 14.9 | 75.10 | 762.80 | |
| GMP-13 | 2/16/2009 | -11.2 | 7.9 | 0.8 | 19.0 | 72.1 | 77.10 | 760.80 | |
| GMP-13 | 3/2/2009 | 9.5 | 0.0 | 0.3 | 20.5 | 79.2 | 74.08 | 763.82 | |
| GMP-13 | 3/16/2009 | -5.4 | 16.3 | 1.5 | 15.0 | 67.0 | 77.59 | 760.31 | |
| GMP-13 | 4/7/2009 | -12.2 | 0.1 | 0.1 | 20.3 | 79.5 | Dry to 77.75 | <760.15 | |
| GMP-13 | 4/20/2009 | -11.7 | 0.0 | 0.2 | 20.0 | 79.8 | 77.50 | 760.40 | |
| GMP-13 | 5/4/2009 | 19.1 | 34.6 | 6.6 | 1.2 | 57.4 | 76.92 | 760.98 | |
| GMP-13 | 5/18/2009 | -1.4 | 5.8 | 0.6 | 18.4 | 75.2 | 77.48 | 760.42 | |
| GMP-13 | 6/9/2009 | -7.1 | 0.0 | 0.0 | 20.9 | 79.1 | Dry to 77.73 | <760.17 | |
| GMP-13 | 6/16/2009 | -5.4 | 0.1 | 0.1 | 20.7 | 79.1 | NM | NM | |
| GMP-13 | 7/1/2009 | -4.3 | 0.0 | 0.0 | 20.8 | 79.2 | 78.72 | 759.18 | |
| GMP-13 | 7/13/2009 | -24.6 | 0.0 | 0.0 | 20.5 | 79.5 | NM | NM | |
| GMP-13 | 7/27/2009 | -10.1 | 0.0 | 0.0 | 21.0 | 79.0 | 78.47 | 759.43 | |
| GMP-15 | 3/19/2008 | 0.7 | 53.9 | 1.3 | 6.9 | 37.6 | NM | NM | |
| GMP-15 | 3/20/2008 | 0.3 | 23.3 | 0.6 | 14.7 | 61.5 | NM | NM | |
| GMP-15 | 3/21/2008 | 5.2 | 82.7 | 2.0 | 0.0 | 15.7 | NM | NM | |
| GMP-15 | 3/24/2008 | 5.8 | 73.9 | 1.7 | 3.0 | 21.3 | NM | NM | |
| GMP-15 | 3/26/2008 | 10.6 | 80.2 | 1.8 | 0.0 | 18.0 | NM | NM | |
| GMP-15 | 4/1/2008 | 11.4 | 81.2 | 1.8 | 0.0 | 16.9 | NM | NM | |
| GMP-15 | 4/4/2008 | 14.8 | 80.8 | 1.7 | 0.0 | 17.4 | Dry to 73.35 | <769.05 | |
| GMP-15 | 4/9/2008 | 5.3 | 81.7 | 1.8 | 0.0 | 16.5 | Dry to 73.35 | <769.05 | |
| GMP-15 | 4/14/2008 | 5.4 | 78.8 | 1.9 | 0.4 | 18.9 | Dry to 73.35 | <769.05 | |
| GMP-15 | 4/16/2008 | 13.5 | 80.4 | 1.6 | 0.3 | 17.9 | Dry to 73.35 | <769.05 | |
| GMP-15 | 4/22/2008 | 3.4 | 79.9 | 1.7 | 0.1 | 18.1 | Dry to 73.35 | <769.05 | |
| GMP-15 | 4/29/2008 | 2.7 | 79.2 | 1.8 | 0.3 | 18.8 | Dry to 73.35 | <769.05 | |
| GMP-15 | 5/6/2008 | 7.8 | 79.7 | 1.6 | 0.3 | 18.3 | dry to 73.35 | <769.05 | |
| GMP-15 | 5/13/2008 | 4.9 | 80.1 | 1.7 | 0.1 | 17.7 | dry to 73.35 | <769.05 | |
| GMP-15 | 5/28/2008 | 0.9 | 80.1 | 1.7 | 0.3 | 18.0 | dry to 73.35 | <769.05 | |
| GMP-15 | 6/3/2008 | 5.0 | 81.4 | 1.8 | 0.3 | 16.7 | dry to 73.36 | <769.06 | |
| GMP-15 | 6/10/2008 | 5.3 | 79.0 | 1.5 | 0.5 | 19.0 | dry to 73.35 | <769.05 | |
| GMP-15 | 6/16/2008 | 0.3 | 41.8 | 0.8 | 9.8 | 48.0 | dry to 73.35 | <769.05 | |
| GMP-15 | 6/23/2008 | 1.6 | 40.2 | 0.7 | 10.4 | 49.0 | dry to 73.35 | <769.05 | |
| GMP-15 | 7/1/2008 | 4.4 | 64.7 | 1.5 | 4.8 | 29.3 | dry to 73.35 | <769.05 | |
| GMP-15 | 7/8/2008 | 6.7 | 52.5 | 1.2 | 7.3 | 39.0 | dry to 73.20 | <769.20 | |
| GMP-15 | 7/14/2008 | 0.0 | 0.4 | 0.0 | 20.9 | 78.7 | dry to 73.20 | <769.20 | |
| GMP-15 | 7/29/2008 | 2.8 | 42.1 | 0.9 | 9.4 | 47.8 | dry to 73.20 | <769.20 | |
| GMP-15 | 8/5/2008 | 0.1 | 7.1 | 0.4 | 18.7 | 73.8 | dry to 73.20 | <769.20 | |

# Probes with Exceedances and Now In Compliance

## Mallard Lake

| Probe | Date | Static Pressure (inches H2O) | Methane (%) | Carbon Dioxide (%) | Oxygen (%) | Balance Gas (%) | Depth to Water (bMV) | Elevation of Groundwater Surface (ft MSL) | Qualifier |
|---|---|---|---|---|---|---|---|---|---|
| GMP-15 | 8/19/2008 | 4.2 | 63.3 | 1.5 | 4.7 | 30.8 | dry to 73.20 | <769.20 | |
| GMP-15 | 9/9/2008 | -0.6 | 80.2 | 2.1 | 0.1 | 17.6 | dry to 73.25 | <769.15 | |
| GMP-15 | 9/23/2008 | 2.0 | 80.6 | 2.1 | 0.4 | 17.0 | dry to 73.20 | <769.20 | |
| GMP-15 | 9/26/2008 | 3.9 | 80.8 | 2.1 | 0.0 | 17.1 | dry to 73.20 | <769.20 | |
| GMP-15 | 10/6/2008 | 6.0 | 81.2 | 2.2 | 0.0 | 16.6 | dry to 73.25 | <769.15 | |
| GMP-15 | 10/17/2008 | 3.6 | 81.2 | 2.3 | 0.0 | 16.6 | dry to 73.30 | <769.10 | |
| GMP-15 | 10/31/2008 | 5.6 | 79.8 | 2.3 | 0.2 | 17.8 | dry to 73.25 | <769.15 | |
| GMP-15 | 11/18/2008 | 0.0 | 80.3 | 2.3 | 0.2 | 17.0 | dry to 73.30 | <769.10 | |
| GMP-15 | 12/2/2008 | 5.2 | 82.5 | 2.7 | 0.1 | 14.8 | dry to 73.25 | <769.15 | |
| GMP-15 | 12/12/2008 | 1.4 | 85.6 | 2.8 | 0.0 | 11.4 | Dry to 72.30 | <769.20 | |
| GMP-15 | 12/16/2008 | 4.0 | 58.1 | 1.8 | 6.8 | 32.3 | dry to 73.35 | <769.15 | |
| GMP-15 | 1/12/2009 | 7.8 | 85.5 | 2.9 | 0.0 | 12.1 | dry to 73.30 | <769.10 | |
| GMP-15 | 1/27/2009 | 2.9 | 91.5 | 3.0 | 0.0 | 5.3 | dry to 73.30 | <769.10 | |
| GMP-15 | 2/2/2009 | 7.6 | 82.6 | 2.8 | 0.0 | 14.6 | dry to 73.30 | <769.10 | |
| GMP-15 | 2/16/2009 | 5.2 | 93.8 | 3.0 | 0.0 | 3.2 | dry to 73.30 | <769.10 | |
| GMP-15 | 3/2/2009 | 4.1 | 92.9 | 3.2 | 0.0 | 3.9 | dry to 73.30 | <769.10 | |
| GMP-15 | 3/16/2009 | 8.2 | 90.5 | 2.5 | 0.0 | 7.0 | Dry to 73.30 | <769.10 | |
| GMP-15 | 4/7/2009 | 9.5 | 85.1 | 2.7 | 0.0 | 12.2 | Dry to 73.30 | <769.10 | |
| GMP-15 | 4/20/2009 | 12.7 | 83.4 | 3.0 | 0.0 | 13.6 | Dry to 73.30 | <769.10 | |
| GMP-15 | 5/4/2009 | 5.7 | 80.6 | 2.8 | 0.2 | 16.4 | Dry to 73.30 | <769.10 | |
| GMP-15 | 5/18/2009 | 5.4 | 86.9 | 2.6 | 0.0 | 10.5 | dry to 73.30 | <769.10 | |
| GMP-15 | 6/4/2009 | 4.9 | 81.2 | 2.9 | 0.0 | 16.0 | NM | NM | |
| GMP-15 | 6/5/2009 | 3.1 | 39.2 | 1.4 | 11.1 | 48.4 | NM | NM | |
| GMP-15 | 6/6/2009 | -7.7 | 0.0 | 0.0 | 20.8 | 79.2 | NM | NM | |
| GMP-15 | 6/7/2009 | -11.7 | 0.0 | 0.0 | 20.7 | 79.3 | NM | NM | |
| GMP-15 | 6/8/2009 | -21.6 | 0.0 | 0.0 | 20.6 | 79.4 | NM | NM | |
| GMP-15 | 6/9/2009 | -20.3 | 0.0 | 0.0 | 20.8 | 79.2 | Dry to 73.24 | <769.16 | |
| GMP-15 | 6/9/2009 | -22.7 | 0.0 | 0.0 | 20.5 | 79.5 | NM | NM | |
| GMP-15 | 6/9/2009 | -22.6 | 0.0 | 0.0 | 20.6 | 79.4 | NM | NM | |
| GMP-15 | 6/10/2009 | -20.9 | 0.0 | 0.0 | 20.9 | 79.1 | NM | NM | |
| GMP-15 | 6/11/2009 | -21.7 | 0.0 | 0.0 | 20.8 | 79.2 | NM | NM | |
| GMP-15 | 6/12/2009 | -25.0 | 0.0 | 0.0 | 20.8 | 79.2 | NM | NM | |
| GMP-15 | 6/13/2009 | -35.6 | 0.0 | 0.0 | 20.6 | 79.4 | NM | NM | |
| GMP-15 | 6/14/2009 | -28.8 | 0.0 | 0.0 | 20.4 | 79.6 | NM | NM | |
| GMP-15 | 6/15/2009 | -28.6 | 0.0 | 0.0 | 19.7 | 80.3 | NM | NM | |
| GMP-15 | 6/15/2009 | -27.2 | 0.0 | 0.0 | 20.8 | 79.2 | NM | NM | |
| GMP-15 | 6/16/2009 | -25.8 | 0.0 | 0.0 | 20.7 | 79.3 | NM | NM | |

# Probes with Exceedances and Now in Compliance

## Mallard Lake

| Probe | Date | Static Pressure (inches H2O) | Methane (%) | Carbon Dioxide (%) | Oxygen (%) | Balance Gas (%) | Depth to Water (bMV) | Elevation of Groundwater Surface (ft MSL) | Qualifier |
|---|---|---|---|---|---|---|---|---|---|
| GMP-15 | 6/17/2009 | -35.4 | 0.0 | 0.1 | 20.7 | 79.8 | NM | NM | |
| GMP-15 | 6/18/2009 | -34.5 | 0.0 | 0.0 | 20.6 | 79.4 | NM | NM | |
| GMP-15 | 6/19/2009 | -32.4 | 0.0 | 0.0 | 20.9 | 79.1 | NM | NM | |
| GMP-15 | 6/20/2009 | -29.1 | 0.0 | 0.0 | 20.5 | 79.5 | NM | NM | |
| GMP-15 | 6/21/2009 | -28.8 | 0.0 | 0.0 | 20.9 | 79.1 | NM | NM | |
| GMP-15 | 6/22/2009 | -26.4 | 0.0 | 0.0 | 20.6 | 79.4 | NM | NM | |
| GMP-15 | 6/23/2009 | -17.2 | 0.0 | 0.0 | 20.4 | 79.6 | NM | NM | |
| GMP-15 | 6/24/2009 | -19.6 | 0.0 | 0.0 | 20.4 | 79.6 | NM | NM | |
| GMP-15 | 6/25/2009 | -13.0 | 0.0 | 0.0 | 27.6 | 79.4 | NM | NM | |
| GMP-15 | 6/26/2009 | -18.7 | 0.0 | 0.0 | 20.6 | 79.4 | NM | NM | |
| GMP-15 | 6/27/2009 | -23.5 | 0.0 | 0.0 | 20.7 | 79.3 | NM | NM | |
| GMP-15 | 6/28/2009 | -14.8 | 0.0 | 0.0 | 20.7 | 79.3 | NM | NM | |
| GMP-15 | 6/29/2009 | -18.1 | 0.0 | 0.0 | 20.7 | 79.3 | NM | NM | |
| GMP-15 | 6/30/2009 | -21.1 | 0.0 | 0.0 | 20.9 | 79.1 | NM | NM | |
| GMP-15 | 7/1/2009 | -25.0 | 0.0 | 0.0 | 20.8 | 79.2 | NM | NM | |
| GMP-15 | 7/2/2009 | -25.1 | 0.0 | 0.0 | 20.5 | 79.5 | NM | NM | |
| GMP-15 | 7/3/2009 | -28.4 | 0.0 | 0.0 | 20.6 | 79.4 | NM | NM | |
| GMP-15 | 7/4/2009 | -7.9 | 0.0 | 0.0 | 21.0 | 79.0 | NM | NM | |
| GMP-15 | 7/5/2009 | -13.4 | 0.0 | 0.1 | 20.3 | 79.5 | NM | NM | |
| GMP-15 | 7/6/2009 | -15.2 | 0.0 | 0.0 | 20.7 | 79.3 | NM | NM | |
| GMP-15 | 7/7/2009 | -11.1 | 0.0 | 0.0 | 20.4 | 79.6 | NM | NM | |
| GMP-15 | 7/8/2009 | -9.9 | 0.0 | 0.0 | 20.7 | 79.3 | NM | NM | |
| GMP-15 | 7/9/2009 | -9.9 | 0.0 | 0.0 | 20.6 | 79.4 | NM | NM | |
| GMP-15 | 7/10/2009 | -9.6 | 0.0 | 0.0 | 20.6 | 79.4 | NM | NM | |
| GMP-15 | 7/11/2009 | -7.2 | 0.0 | 0.1 | 20.4 | 79.5 | NM | NM | |
| GMP-15 | 7/12/2009 | -7.9 | 0.0 | 0.0 | 20.4 | 79.6 | NM | NM | |
| GMP-15 | 7/13/2009 | -6.0 | 0.0 | 0.0 | 20.6 | 79.4 | NM | NM | |
| GMP-15 | 7/14/2009 | -4.1 | 0.0 | 0.0 | 20.2 | 79.7 | NM | NM | |
| GMP-15 | 7/15/2009 | -0.7 | 0.0 | 0.0 | 20.4 | 79.6 | NM | NM | |
| GMP-15 | 7/16/2009 | -0.6 | 0.0 | 0.0 | 20.4 | 79.6 | NM | NM | |
| GMP-15 | 7/17/2009 | 0.0 | 0.0 | 0.1 | 20.6 | 79.3 | NM | NM | |
| GMP-15 | 7/18/2009 | 0.3 | 0.0 | 0.0 | 20.6 | 79.4 | NM | NM | |
| GMP-15 | 7/19/2009 | -4.2 | 0.0 | 0.1 | 20.5 | 79.4 | NM | NM | |
| GMP-15 | 7/20/2009 | 0.0 | 0.0 | 0.2 | 20.3 | 79.5 | NM | NM | |
| GMP-15 | 7/21/2009 | 1.5 | 0.0 | 0.3 | 20.3 | 79.4 | NM | NM | |
| GMP-15 | 7/22/2009 | 3.1 | 1.0 | 2.8 | 10.0 | 86.3 | NM | NM | |
| GMP-15 | 7/23/2009 | -3.3 | 1.8 | 3.2 | 8.0 | 87.3 | NM | NM | |

# Probes with Exceedances and Now in Compliance

## Mallard Lake

| Probe | Date | Static Pressure (Inches H2O) | Methane (%) | Carbon Dioxide (%) | Oxygen (%) | Balance Gas (%) | Depth to Water (bMV) | Elevation of Groundwater Surface (ft MSL) | Qualifier |
|---|---|---|---|---|---|---|---|---|---|
| GMP-15 | 7/24/2009 | -9.9 | 1.4 | 2.6 | 10.2 | 85.8 | NM | NM | |
| GMP-15 | 7/25/2009 | -8.5 | 1.5 | 2.4 | 10.3 | 85.8 | NM | NM | |
| GMP-15 | 7/26/2009 | -12.4 | 1.1 | 1.8 | 13.7 | 83.5 | NM | NM | |
| GMP-15 | 7/27/2009 | -14.6 | 0.7 | 1.2 | 16.1 | 81.9 | NM | NM | |
| GP-C | 7/1/2008 | -8.0 | 0.0 | 0.0 | 20.5 | 79.5 | 64.84 | 774.93 | |
| GP-C | 7/8/2008 | -13.2 | 8.0 | 0.4 | 16.9 | 74.8 | 64.95 | 774.82 | |
| GP-C | 7/14/2008 | -11.3 | 0.2 | 0.0 | 20.5 | 79.3 | NM | NM | Too much water in surface casing |
| GP-C | 7/29/2008 | -12.8 | 0.0 | 0.0 | 20.2 | 78.8 | 65.10 | 774.67 | |
| GP-C | 8/5/2008 | -16.0 | 2.0 | 0.2 | 19.4 | 78.5 | 65.41 | 774.36 | |
| GP-C | 8/19/2008 | -10.0 | 0.2 | 0.2 | 20.0 | 79.6 | 66.60 | 773.17 | |
| GP-C | 9/9/2008 | -12.0 | 2.3 | 1.1 | 17.6 | 79.0 | 67.21 | 772.56 | |
| GP-C | 10/6/2008 | 6.5 | 13.3 | 1.4 | 13.1 | 72.1 | 68.24 | 771.53 | |
| GP-C | 10/17/2008 | 7.6 | 33.4 | 2.2 | 4.8 | 59.6 | 68.28 | 771.49 | |
| GP-C | 10/31/2008 | 4.8 | 0.1 | 0.4 | 20.5 | 79.0 | 68.13 | 771.64 | |
| GP-C | 11/18/2008 | -1.9 | 9.7 | 0.9 | 16.4 | 73.0 | NM | NM | |
| GP-C | 12/2/2008 | 0.0 | 19.2 | 1.6 | 11.9 | 67.1 | 67.44 | 772.33 | |
| GP-C | 1/12/2009 | 1.1 | 7.7 | 2.3 | 14.9 | 75.6 | 65.46 | 774.31 | |
| GP-C | 1/27/2009 | 0.0 | 18.0 | 3.1 | 10.8 | 68.1 | NM | NM | |
| GP-C | 2/16/2009 | NM | 0.8 | 0.2 | 20.2 | 78.8 | 65.85 | 773.92 | |
| GP-C | 3/3/2009 | 0.0 | 10.9 | 1.6 | 11.5 | 76.0 | NM | NM | WL tape sticking to side of PVC casing |
| GP-C | 3/16/2009 | 1.4 | 22.4 | 0.7 | 6.8 | 70.1 | NM | NM | |
| GP-C | 4/7/2009 | -2.7 | 18.2 | 1.6 | 7.6 | 72.6 | NM | NM | |
| GP-C | 4/20/2009 | -2.1 | 16.9 | 1.8 | 8.7 | 72.8 | NM | NM | |
| GP-C | 5/1/2009 | 5.1 | 2.0 | 0.3 | 18.6 | 79.0 | 59.41 | 780.36 | |
| GP-C | 5/18/2009 | -6.8 | 9.7 | 1.2 | 12.5 | 76.6 | 56.43 | 783.34 | |
| GP-C | 6/10/2009 | -10.1 | 11.1 | 2.3 | 9.6 | 77.0 | NM | NM | |
| GP-C | 6/17/2009 | -15.0 | 10.3 | 3.2 | 9.0 | 77.5 | NM | NM | |
| GP-C | 7/1/2009 | -18.6 | 7.0 | 6.1 | 1.7 | 85.3 | NM | NM | |
| GP-C | 7/13/2009 | -30.1 | 0.0 | 0.1 | 20.2 | 79.7 | Nm | NM | |
| GP-C | 7/27/2009 | -23.1 | 0.5 | 6.9 | 3.4 | 89.2 | NM | NM | |
| GP-H | 12/6/2008 | NM | 15.6 | 2.2 | 10.2 | 72.0 | NM | NM | Collected by GRS personnel |
| GP-H | 12/11/2008 | NM | 0.6 | 3.2 | 15.4 | 80.8 | NM | NM | Collected by GRS personnel |
| GP-H | 12/23/2008 | 2.2 | 22.5 | 3.2 | 8.7 | 65.5 | 15.00 | 764.76 | |
| GP-H | 1/7/2009 | 2.4 | 66.4 | 5.7 | 0.0 | 28.9 | 14.70 | 765.06 | |
| GP-H | 1/19/2009 | 0.1 | 34.6 | 4.0 | 6.0 | 55.2 | 15.16 | 764.60 | |
| GP-H | 1/26/2009 | -0.7 | 0.0 | 0.0 | 20.9 | 79.1 | 15.45 | 764.31 | |
| GP-H | 2/3/2009 | -0.7 | 0.0 | 0.1 | 20.9 | 79.0 | 15.52 | 764.24 | |

# Probes with Exceedances and Now In Compliance

## Mallard Lake

| Probe | Date | Static Pressure (inches H2O) | Methane (%) | Carbon Dioxide (%) | Oxygen (%) | Balance Gas (%) | Depth to Water (bMV) | Elevation of Groundwater Surface (ft MSL) | Qualifier |
|---|---|---|---|---|---|---|---|---|---|
| GP-H | 2/10/2009 | 2.0 | 67.2 | 4.5 | 0.0 | 28.3 | 15.27 | 764.49 | |
| GP-H | 2/17/2009 | 4.8 | 35.4 | 3.4 | 5.0 | 56.1 | 15.09 | 764.67 | |
| GP-H | 2/25/2009 | 1.6 | 43.4 | 3.8 | 2.7 | 50.0 | 15.22 | 764.54 | |
| GP-H | 3/3/2009 | 0.0 | 3.9 | 3.0 | 15.0 | 78.1 | 14.86 | 764.90 | |
| GP-H | 3/17/2009 | 1.4 | 64.1 | 3.4 | 0.0 | 32.5 | 14.86 | 764.90 | |
| GP-H | 4/8/2009 | 4.8 | 73.2 | 2.7 | 0.0 | 23.8 | 15.00 | 764.76 | |
| GP-H | 4/21/2009 | 7.2 | 70.9 | 3.2 | 0.0 | 26.0 | 15.24 | 764.52 | |
| GP-H | 5/5/2009 | 5.0 | 73.3 | 2.4 | 0.0 | 24.2 | 14.98 | 764.78 | |
| GP-H | 5/18/2009 | 4.7 | 71.2 | 2.2 | 0.1 | 26.8 | 17.15 | 762.61 | |
| GP-H | 6/10/2009 | 3.1 | 75.2 | 2.2 | 0.8 | 20.2 | 15.14 | 764.62 | |
| GP-H | 6/16/2009 | 4.1 | 79.8 | 2.2 | 0.0 | 18.0 | 15.22 | 764.54 | |
| GP-H | 6/30/2009 | 1.4 | 82.6 | 2.4 | 0.0 | NM | 15.15 | 764.61 | |
| GP-H | 7/7/2009 | 0.2 | 67.9 | 4.1 | 0.0 | 28.0 | NM | NM | |
| GP-H | 7/13/2009 | -11.6 | 70.1 | 3.2 | 0.4 | 26.0 | NM | NM | |
| GP-H | 7/23/2009 | -2.2 | 0.2 | 0.1 | 21.0 | 78.7 | NM | NM | |
| GP-H | 7/24/2009 | -0.8 | 0.0 | 0.0 | 20.0 | 80.0 | NM | NM | |
| GP-H | 7/24/2009 | -0.8 | 0.0 | 0.0 | 20.0 | 80.0 | NM | NM | |
| GP-H | 7/24/2009 | -3.5 | 0.0 | 0.0 | 20.6 | 79.4 | NM | NM | |
| GP-H | 7/25/2009 | -0.1 | 0.0 | 0.0 | 20.8 | 79.2 | NM | NM | |
| GP-H | 7/25/2009 | -0.1 | 0.0 | 0.0 | 20.8 | 79.2 | NM | NM | |
| GP-H | 7/25/2009 | 0.0 | 0.0 | 0.0 | 20.6 | 79.4 | NM | NM | |
| GP-H | 7/26/2009 | -2.6 | 0.0 | 0.0 | 20.6 | 79.4 | NM | NM | |
| GP-H | 7/26/2009 | -2.6 | 0.0 | 0.0 | 20.6 | 79.4 | NM | NM | |
| GP-H | 7/26/2009 | -5.5 | 0.0 | 0.0 | 21.0 | 79.0 | NM | NM | |
| GP-H | 7/27/2009 | -79.2 | 0.0 | 0.0 | 20.8 | 79.2 | NM | NM | |
| GP-H | 7/27/2009 | -3.8 | 0.0 | 0.0 | 20.8 | 79.2 | NM | NM | |
| GP-H | 7/27/2009 | -3.7 | 0.0 | 0.0 | 20.5 | 79.5 | NM | NM | |
| GP-U | 3/19/2008 | 0.0 | 16.2 | 0.4 | 15.0 | 68.3 | NM | NM | |
| GP-U | 3/20/2008 | 0.0 | 14.6 | 0.4 | 15.8 | 69.1 | NM | NM | |
| GP-U | 3/21/2008 | 0.2 | 27.5 | 0.9 | 10.8 | 60.8 | NM | NM | |
| GP-U | 3/24/2008 | 0.0 | 18.7 | 0.5 | 13.9 | 66.5 | NM | NM | |
| GP-U | 3/26/2008 | 0.0 | 23.0 | 0.6 | 11.9 | 64.2 | NM | NM | |
| GP-U | 4/1/2008 | 0.0 | 16.5 | 0.5 | 14.8 | 68.3 | NM | NM | |
| GP-U | 4/4/2008 | 0.0 | 19.1 | 0.6 | 13.4 | 67.1 | 69.74 | 767.46 | |
| GP-U | 4/9/2008 | 0.0 | 11.2 | 0.4 | 16.7 | 71.9 | 68.89 | 768.31 | |
| GP-U | 4/14/2008 | 0.0 | 7.4 | 0.3 | 17.8 | 74.6 | 69.98 | 767.22 | |
| GP-U | 4/16/2008 | 0.0 | 16.3 | 0.5 | 14.5 | 68.9 | 69.85 | 767.35 | |

# Probes with Exceedances and Now in Compliance

## Mallard Lake

| Probe | Date | Static Pressure (inches H2O) | Methane (%) | Carbon Dioxide (%) | Oxygen (%) | Balance Gas (%) | Depth to Water (bMV) | Elevation of Groundwater Surface (ft MSL) | Qualifier |
|---|---|---|---|---|---|---|---|---|---|
| GP-U | 4/22/2008 | 0.0 | 12.8 | 0.4 | 15.9 | 71.1 | 69.93 | 767.27 | |
| GP-U | 4/29/2008 | 0.0 | 10.7 | 0.4 | 16.6 | 72.7 | 70.05 | 767.15 | |
| GP-U | 5/6/2008 | 0.0 | 14.8 | 0.5 | 14.9 | 70.2 | 69.98 | 767.22 | |
| GP-U | 5/13/2008 | 0.0 | 9.7 | 0.3 | 17.0 | 73.1 | 69.99 | 767.21 | |
| GP-U | 5/28/2008 | -0.1 | 6.0 | 0.2 | 18.2 | 75.6 | 70.15 | 767.05 | |
| GP-U | 6/3/2008 | 0.0 | 14.5 | 0.7 | 14.8 | 70.2 | 70.06 | 767.14 | |
| GP-U | 6/10/2008 | 0.0 | 11.2 | 0.3 | 15.8 | 72.4 | 70.10 | 767.10 | |
| GP-U | 6/16/2008 | 0.2 | 19.5 | 1.0 | 12.0 | 67.6 | 70.02 | 767.18 | |
| GP-U | 6/23/2008 | 0.0 | 2.2 | 0.0 | 19.8 | 78.2 | 70.30 | 766.90 | |
| GP-U | 7/1/2008 | 0.2 | 14.8 | 1.0 | 14.4 | 69.5 | 70.15 | 767.05 | |
| GP-U | 7/8/2008 | 0.1 | 11.4 | 0.9 | 15.6 | 72.2 | 70.13 | 767.07 | |
| GP-U | 7/14/2008 | 0.0 | 11.2 | 0.8 | 15.8 | 72.3 | 70.15 | 767.05 | |
| GP-U | 7/29/2008 | -0.1 | 12.6 | 1.1 | 15.1 | 71.4 | 70.20 | 767.00 | |
| GP-U | 8/5/2008 | -0.4 | 21.3 | 1.6 | 10.2 | 66.6 | 70.19 | 767.01 | |
| GP-U | 8/19/2008 | 0.0 | 6.1 | 0.6 | 17.2 | 76.3 | 70.30 | 766.90 | |
| GP-U | 9/9/2008 | -1.1 | 12.2 | 1.4 | 14.5 | 71.9 | 70.41 | 766.79 | |
| GP-U | 9/23/2008 | 0.0 | 4.5 | 0.5 | 18.7 | 76.4 | 70.60 | 766.60 | |
| GP-U | 9/26/2008 | 0.6 | 14.5 | 1.9 | 13.0 | 71.1 | 70.52 | 766.68 | |
| GP-U | 10/6/2008 | 0.0 | 7.6 | 1.3 | 17.2 | 74.8 | 70.41 | 766.79 | |
| GP-U | 10/17/2008 | 0.3 | 15.0 | 1.9 | 13.2 | 70.1 | 70.28 | 766.92 | |
| GP-U | 10/31/2008 | 0.0 | 9.0 | 1.2 | 16.3 | 73.8 | 70.25 | 766.95 | |
| GP-U | 11/18/2008 | 0.0 | 16.6 | 1.4 | 13.3 | 68.4 | 70.38 | 766.82 | |
| GP-U | 12/2/2008 | 0.0 | 10.3 | 0.8 | 16.2 | 72.8 | 70.01 | 767.19 | |
| GP-U | 12/12/2008 | 0.4 | 9.7 | 0.7 | 16.4 | 74.1 | 70.30 | 766.90 | |
| GP-U | 12/16/2008 | -3.5 | 26.2 | 1.9 | 9.1 | 63.0 | 70.00 | 767.20 | |
| GP-U | 1/12/2009 | 0.0 | 7.5 | 0.5 | 17.6 | 74.7 | 69.85 | 767.35 | |
| GP-U | 1/27/2009 | 0.0 | 17.4 | 1.2 | 13.4 | 68.3 | 69.86 | 767.34 | |
| GP-U | 2/2/2009 | 0.0 | 14.9 | 0.9 | 15.0 | 70.2 | 69.50 | 767.70 | |
| GP-U | 2/16/2009 | 0.0 | 2.1 | 0.2 | 19.8 | 78.0 | 69.77 | 767.43 | |
| GP-U | 3/2/2009 | 0.0 | 1.0 | 0.3 | 20.4 | 78.3 | 69.90 | 767.30 | |
| GP-U | 3/16/2009 | 0.0 | 2.3 | 6.2 | 19.6 | 71.9 | 69.82 | 767.38 | |
| GP-U | 4/7/2009 | 1.4 | 2.3 | 0.3 | 19.0 | 78.4 | 69.72 | 767.48 | |
| GP-U | 4/20/2009 | 0.0 | 2.9 | 0.5 | 18.3 | 78.3 | 69.77 | 767.43 | |
| GP-U | 5/4/2009 | 0.2 | 2.0 | 0.3 | 19.2 | 78.5 | 69.84 | 767.36 | |
| GP-U | 5/18/2009 | 0.0 | 0.9 | 0.1 | 19.9 | 79.1 | 70.15 | 767.05 | |
| GP-U | 6/9/2009 | -0.6 | 2.4 | 0.4 | 19.3 | 77.9 | 70.46 | 766.74 | |
| GP-U | 6/17/2009 | 0.0 | 4.2 | 0.8 | 17.9 | 77.1 | NM | NM | |

# Probes with Exceedances and Now in Compliance

## Mallard Lake

| Probe | Date | Static Pressure (Inches H2O) | Methane (%) | Carbon Dioxide (%) | Oxygen (%) | Balance Gas (%) | Depth to Water (bMV) | Elevation of Groundwater Surface (ft MSL) | Qualifier |
|---|---|---|---|---|---|---|---|---|---|
| GP-U | 7/1/2009 | 0.0 | 1.7 | 0.3 | 19.7 | 78.3 | 72.63 | 764.57 | |
| GP-U | 7/13/2009 | -14.2 | 1.0 | 0.2 | 19.5 | 79.3 | NM | NM | |
| GP-U | 7/20/2009 | 0.1 | 1.4 | 0.3 | 19.6 | 78.7 | NM | NM | |
| GP-U | 7/21/2009 | 0.6 | 2.1 | 0.4 | 18.4 | 79.1 | NM | NM | |
| GP-U | 7/22/2009 | 0.0 | 1.0 | 0.2 | 19.9 | 79.0 | NM | NM | |
| GP-U | 7/23/2009 | 0.7 | 1.6 | 0.3 | 19.4 | 78.7 | NM | NM | |
| GP-U | 7/24/2009 | 0.0 | 2.1 | 0.4 | 18.6 | 78.7 | NM | NM | |
| GP-U | 7/25/2009 | 0.0 | 1.9 | 0.4 | 19.4 | 78.3 | NM | NM | |
| GP-U | 7/26/2009 | 0.0 | 1.7 | 0.4 | 19.3 | 78.6 | NM | NM | |
| GP-U | 7/27/2009 | -0.5 | 1.2 | 0.3 | 19.5 | 79.1 | NM | NM | |
| P6B | 3/19/2008 | 1.9 | 60.8 | 2.4 | 5.2 | 37.3 | NM | NM | |
| P6B | 3/20/2008 | 5.5 | 76.5 | 3.2 | 0.9 | 19.4 | NM | NM | |
| P6B | 3/21/2008 | 1.3 | 59.5 | 2.3 | 6.1 | 32.3 | NM | NM | |
| P6B | 3/24/2008 | 3.8 | 78.9 | 3.0 | 0.3 | 17.7 | NM | NM | |
| P6B | 3/26/2008 | 5.3 | 79.4 | 3.0 | 0.1 | 17.8 | NM | NM | |
| P6B | 4/1/2008 | 5.7 | 79.4 | 3.0 | 0.0 | 17.5 | NM | NM | |
| P6B | 4/4/2008 | 12.9 | 79.3 | 3.0 | 0.0 | 17.6 | 40.55 | 763.95 | |
| P6B | 4/9/2008 | 10.2 | 80.0 | 3.1 | 0.1 | 16.8 | 40.60 | 763.90 | |
| P6B | 4/14/2008 | 8.2 | 77.3 | 3.1 | 0.2 | 19.4 | 40.67 | 763.83 | |
| P6B | 4/16/2008 | 13.8 | 77.4 | 2.8 | 0.3 | 19.3 | 40.69 | 768.81 | |
| P6B | 4/22/2008 | 14.8 | 78.7 | 3.0 | 0.0 | 18.6 | 40.78 | 763.72 | |
| P6B | 4/29/2008 | 10.8 | 77.8 | 3.0 | 0.3 | 19.0 | 40.79 | 763.71 | |
| P6B | 5/6/2008 | 12.0 | 78.4 | 3.0 | 0.2 | 18.4 | 40.79 | 763.71 | |
| P6B | 5/13/2008 | 8.6 | 78.9 | 2.9 | 0.3 | 17.9 | 40.78 | 763.72 | |
| P6B | 5/28/2008 | 2.0 | 76.4 | 2.7 | 0.4 | 20.9 | 40.80 | 763.70 | |
| P6B | 6/3/2008 | 5.8 | 77.8 | 2.8 | 0.7 | 18.3 | 40.78 | 763.72 | |
| P6B | 6/10/2008 | 2.8 | 79.3 | 2.8 | 0.4 | 17.5 | 40.77 | 763.73 | |
| P6B | 6/16/2008 | 2.0 | 78.5 | 2.5 | 0.3 | 18.8 | 40.66 | 763.84 | |
| P6B | 6/23/2008 | 0.0 | 10.3 | 0.2 | 18.2 | 71.6 | 40.78 | 763.72 | |
| P6B | 7/1/2008 | -0.5 | 0.0 | 0.0 | 20.8 | 79.2 | 40.62 | 763.88 | |
| P6B | 7/8/2008 | -1.6 | 0.0 | 0.0 | 20.9 | 79.1 | 40.60 | 763.90 | |
| P6B | 7/14/2008 | -3.2 | 0.0 | 0.0 | 20.9 | 79.1 | 40.63 | 763.87 | |
| P6B | 7/29/2008 | -4.2 | 0.0 | 0.1 | 20.8 | 79.1 | 41.30 | 763.20 | |
| P6B | 8/5/2008 | -4.7 | 0.0 | 0.1 | 20.8 | 79.1 | dry to 41.30 | <763.20 | |
| P6B | 8/19/2008 | -7.6 | 0.0 | 0.2 | 20.6 | 79.2 | dry to 41.26 | <762.89 | |
| P6B | 8/27/2008 | -4.0 | 0.0 | 0.1 | 20.7 | 79.2 | NM | NM | |
| P6B | 8/28/2008 | -0.9 | 0.0 | 0.2 | 20.6 | 79.2 | NM | NM | |

# Probes with Exceedances and Now in Compliance

## Mallard Lake

| Probe | Date | Static Pressure (Inches H2O) | Methane (%) | Carbon Dioxide (%) | Oxygen (%) | Balance Gas (%) | Depth to Water (bMV) | Elevation of Groundwater Surface (ft MSL) | Quallfier |
|---|---|---|---|---|---|---|---|---|---|
| P6B | 9/5/2008 | -0.2 | 0.1 | 4.4 | 2.0 | 93.5 | dry to 41.20 | <763.30 | |
| P6B | 9/9/2008 | -2.6 | 0.0 | 0.2 | 21.2 | 78.5 | dry to 41.25 | <762.90 | |
| P6B | 9/26/2008 | 1.8 | 9.4 | 8.9 | 0.0 | 81.1 | dry to 41.30 | <763.20 | |
| P6B | 10/6/2008 | -2.7 | 0.0 | 0.1 | 20.8 | 79.1 | 40.61 | 763.89 | |
| P6B | 10/17/2008 | 0.4 | 3.2 | 6.7 | 0.0 | 90.2 | 40.62 | 763.88 | |
| P6B | 10/31/2008 | -0.8 | 0.0 | 0.2 | 20.7 | 79.1 | 40.58 | 763.92 | |
| P6B | 11/18/2008 | 0.6 | 20.3 | 7.0 | 2.5 | 70.2 | 40.57 | 763.93 | |
| P6B | 12/2/2008 | 4.7 | 73.2 | 5.4 | 0.0 | 21.5 | 40.57 | 763.93 | |
| P6B | 12/16/2008 | 0.0 | 0.0 | 0.1 | 20.8 | 79.0 | 40.62 | 763.88 | |
| P6B | 1/9/2009 | 0.4 | 64.3 | 3.2 | 4.6 | 28.2 | 40.63 | 763.87 | |
| P6B | 1/26/2009 | -0.5 | 51.4 | 2.6 | 7.4 | 39.3 | 40.62 | 763.88 | |
| P6B | 2/2/2009 | 0.0 | 50.6 | 2.6 | 7.8 | 39.9 | 40.37 | 764.13 | |
| P6B | 2/17/2009 | 2.0 | 71.1 | 3.2 | 2.5 | 22.5 | 40.64 | 763.86 | |
| P6B | 3/2/2009 | 0.0 | 48.6 | 2.7 | 7.7 | 41.0 | 40.57 | 763.93 | |
| P6B | 3/16/2009 | 1.4 | 75.0 | 3.0 | 2.6 | 19.4 | 40.67 | 763.83 | |
| P6B | 4/7/2009 | 9.5 | 80.8 | 3.7 | 0.0 | 15.5 | 40.67 | 763.83 | |
| P6B | 4/20/2009 | 8.9 | 80.9 | 3.4 | 0.0 | 15.6 | 40.65 | 763.85 | |
| P6B | 5/4/2009 | 4.3 | 78.0 | 3.1 | 0.1 | 18.7 | 40.69 | 763.81 | |
| P6B | 5/18/2009 | -1.4 | 0.0 | 0.0 | 20.5 | 79.5 | 40.63 | 763.87 | |
| P6B | 6/9/2009 | 1.2 | 75.4 | 3.1 | 0.0 | 21.3 | 41.20 | 763.30 | |
| P6B | 6/16/2009 | 0.0 | 76.3 | 2.9 | 0.0 | 20.8 | 41.75 | 762.75 | |
| P6B | 6/30/2009 | 2.7 | 81.2 | 3.0 | 0.0 | 15.8 | 43.02 | 761.48 | |
| P6B | 7/13/2009 | -19.5 | 0.0 | 0.0 | 20.4 | 79.6 | NM | NM | |
| P6B | 7/16/2009 | -0.2 | 0.0 | 0.0 | 20.3 | 79.7 | NM | NM | |
| P6B | 7/28/2009 | -3.8 | 0.0 | 0.0 | 20.9 | 79.0 | 40.56 | 763.94 | |

# Probes with Exceedances

## Mallard Lake

| Probe | Date | Static Pressure (inches H2O) | Methane (%) | Carbon Dioxide (%) | Oxygen (%) | Balance Gas (%) | Depth to Water (bMV) | Elevation of Groundwater Surface (ft MSL) | Qualifier |
|---|---|---|---|---|---|---|---|---|---|
| GMP-14 | 7/1/2008 | -0.1 | 13.2 | 1.2 | 15.0 | 70.6 | 74.19 | 767.81 | |
| GMP-14 | 7/8/2008 | 0.2 | 15.9 | 1.5 | 13.9 | 68.6 | 74.20 | 767.80 | |
| GMP-14 | 7/14/2008 | 0.0 | 13.4 | 1.5 | 14.8 | 70.4 | 74.21 | 767.79 | |
| GMP-14 | 7/29/2008 | 0.6 | 19.1 | 2.0 | 11.8 | 67.2 | 74.25 | 767.75 | |
| GMP-14 | 8/5/2008 | 0.2 | 30.3 | 3.3 | 6.9 | 59.4 | 74.26 | 767.74 | |
| GMP-14 | 8/19/2008 | 0.0 | 0.0 | 0.1 | 20.2 | 79.7 | 74.31 | 767.69 | |
| GMP-14 | 9/9/2008 | 0.0 | 0.0 | 0.4 | 20.8 | 78.8 | 74.39 | 767.61 | |
| GMP-14 | 10/6/2008 | -1.3 | 0.0 | 0.2 | 21.0 | 78.8 | 74.55 | 767.45 | |
| GMP-14 | 10/17/2008 | -0.6 | 0.0 | 0.2 | 20.8 | 79.0 | 74.62 | 767.38 | |
| GMP-14 | 10/31/2008 | -0.2 | 0.0 | 0.4 | 20.7 | 78.9 | 74.63 | 767.37 | |
| GMP-14 | 11/18/2008 | -1.4 | 0.1 | 0.3 | 20.8 | 78.8 | 74.69 | 767.31 | |
| GMP-14 | 12/2/2008 | -0.2 | 0.0 | 0.3 | 20.5 | 79.2 | 74.67 | 767.33 | |
| GMP-14 | 12/12/2008 | -0.2 | 6.6 | 0.9 | 17.8 | 74.4 | 70.60 | <771.40 | |
| GMP-14 | 1/12/2009 | 0.0 | 17.2 | 2.0 | 13.5 | 67.1 | 74.62 | 767.38 | |
| GMP-14 | 1/27/2009 | 0.0 | 39.6 | 2.5 | 7.6 | 49.7 | 74.61 | 767.39 | |
| GMP-14 | 2/3/2009 | -0.4 | 63.0 | 3.5 | 0.0 | 33.2 | 74.57 | 765.63 | |
| GMP-14 | 2/4/2009 | -1.6 | 0.5 | 0.1 | 20.4 | 79.0 | 74.55 | 765.65 | |
| GMP-14 | 2/5/2009 | 0.1 | 0.3 | 0.3 | 20.3 | 79.2 | 74.58 | 765.62 | |
| GMP-14 | 2/6/2009 | NM | NM | NM | NM | NM | NM | NM | |
| GMP-14 | 2/7/2009 | 0.0 | 34.5 | 1.8 | 8.2 | 54.5 | 74.54 | 765.66 | |
| GMP-14 | 2/8/2009 | -2.9 | 19.5 | 1.1 | 14.3 | 64.6 | 74.51 | 765.69 | |
| GMP-14 | 2/9/2009 | 0.9 | 2.4 | 0.2 | 20.2 | 76.2 | NM | NM | |
| GMP-14 | 2/13/2009 | NM | NM | NM | NM | NM | NM | NM | |
| GMP-14 | 2/16/2009 | -3.1 | 0.0 | 0.1 | 20.7 | 79.2 | 74.54 | 767.46 | |
| GMP-14 | 2/18/2009 | -1.1 | 2.5 | 0.4 | 19.8 | 77.0 | 74.51 | 765.69 | |
| GMP-14 | 2/23/2009 | NM | NM | NM | NM | NM | NM | NM | Inadvertently locked |
| GMP-14 | 2/25/2009 | 2.0 | 0.0 | 0.1 | 21.0 | 78.5 | 74.72 | 765.48 | |
| GMP-14 | 2/26/2009 | NM | NM | NM | NM | NM | NM | NM | Inadvertently locked |
| GMP-14 | 3/3/2009 | 0.0 | 0.0 | 0.2 | 21.1 | 78.7 | 74.48 | 767.52 | |
| GMP-14 | 3/10/2009 | NM | NM | NM | NM | NM | NM | NM | Inadvertently locked |
| GMP-14 | 3/11/2009 | NM | NM | NM | NM | NM | NM | NM | Inadvertently locked |
| GMP-14 | 3/16/2009 | -2.7 | 0.0 | 0.1 | 20.8 | 79.1 | 74.41 | 767.59 | |
| GMP-14 | 3/27/2009 | 1.4 | 0.0 | 0.3 | 20.1 | 79.6 | 74.31 | 765.89 | |
| GMP-14 | 4/7/2009 | 1.4 | 11.7 | 3.5 | 8.2 | 76.6 | 74.26 | 767.74 | |
| GMP-14 | 4/20/2009 | 1.6 | 5.9 | 1.9 | 14.9 | 77.1 | 74.18 | 767.82 | |
| GMP-14 | 5/1/2009 | 0.1 | 1.1 | 0.3 | 19.4 | 79.1 | 74.26 | 767.74 | |
| GMP-14 | 5/18/2009 | 0.0 | 1.8 | 0.1 | 19.7 | 78.4 | 74.12 | 767.88 | |

# Probes with Exceedances
## Mallard Lake

| Probe | Date | Static Pressure (inches H2O) | Methane (%) | Carbon Dioxide (%) | Oxygen (%) | Balance Gas (%) | Depth to Water (bMV) | Elevation of Groundwater Surface (ft MSL) | Qualifier |
|---|---|---|---|---|---|---|---|---|---|
| GMP-14 | 6/10/2009 | 2.0 | 59.5 | 3.0 | 0.4 | 37.1 | 73.90 | 768.10 | |
| GMP-14 | 6/17/2009 | 1.4 | 63.5 | 3.2 | 0.0 | 33.3 | 74.50 | 767.50 | |
| GMP-14 | 7/1/2009 | 0.6 | 58.0 | 2.9 | 0.4 | 38.6 | 73.75 | 768.25 | |
| GMP-14 | 7/13/2009 | -16.1 | 44.6 | 2.4 | 3.6 | 49.1 | Bent | NM | |
| GMP-14 | 7/24/2009 | 0.0 | 52.8 | 2.9 | 1.6 | 42.3 | 73.14 | NM | |
| GMP-14 | 7/25/2009 | 1.8 | 46.8 | 2.2 | 4.3 | 46.7 | NM | NM | |
| GMP-14 | 7/26/2009 | 0.0 | 54.1 | 2.9 | 2.0 | 41.0 | NM | NM | |
| GMP-14 | 7/27/2009 | 0.0 | 38.0 | 1.7 | 7.4 | 52.9 | 73.08 | 768.92 | |
| GMP-17 | 3/19/2008 | 0.0 | 18.7 | 8.6 | 3.1 | 69.6 | NM | NM | |
| GMP-17 | 3/20/2008 | 0.0 | 3.0 | 10.7 | 4.2 | 82.3 | NM | NM | |
| GMP-17 | 3/21/2008 | 0.0 | 9.8 | 10.0 | 4.1 | 76.4 | NM | NM | |
| GMP-17 | 3/24/2008 | 0.0 | 0.0 | 5.4 | 16.1 | 78.5 | NM | NM | |
| GMP-17 | 3/26/2008 | 0.0 | 14.5 | 9.7 | 10.2 | 74.5 | NM | NM | |
| GMP-17 | 4/1/2008 | 0.0 | 18.5 | 8.4 | 3.1 | 70.5 | NM | NM | |
| GMP-17 | 4/4/2008 | 0.0 | 19.1 | 7.2 | 5.1 | 68.5 | 66.15 | 763.45 | |
| GMP-17 | 4/9/2008 | 0.0 | 2.9 | 7.9 | 8.5 | 80.7 | 65.04 | 764.56 | |
| GMP-17 | 4/14/2008 | 0.0 | 0.6 | 4.1 | 16.6 | 78.8 | 64.88 | 764.72 | |
| GMP-17 | 4/16/2008 | 0.0 | 8.5 | 6.2 | 3.9 | 81.4 | 64.99 | 764.61 | |
| GMP-17 | 4/22/2008 | 0.0 | 6.5 | 7.0 | 4.0 | 82.6 | 65.75 | 763.85 | |
| GMP-17 | 4/29/2008 | 0.0 | 0.6 | 3.3 | 14.8 | 81.5 | 65.62 | 763.98 | |
| GMP-17 | 5/1/2008 | 0.0 | 28.7 | 6.0 | 4.2 | 61.1 | NM | NM | |
| GMP-17 | 5/6/2008 | 0.0 | 0.1 | 2.0 | 18.3 | 79.7 | 65.47 | 764.13 | |
| GMP-17 | 5/13/2008 | 0.0 | 0.4 | 3.6 | 15.5 | 80.5 | 65.18 | 764.42 | |
| GMP-17 | 5/28/2008 | 0.0 | 0.0 | 4.4 | 15.6 | 80.0 | dry to 67.55 | <762.05 | |
| GMP-17 | 6/3/2008 | 0.0 | 16.4 | 7.7 | 5.4 | 70.4 | 67.67 | 761.93 | |
| GMP-17 | 6/10/2008 | 0.1 | 7.6 | 9.2 | 2.3 | 81.1 | 68.81 | 760.79 | |
| GMP-17 | 6/16/2008 | 0.0 | 7.6 | 9.9 | 3.9 | 78.7 | 69.98 | 759.62 | |
| GMP-17 | 6/23/2008 | 0.0 | 5.0 | 7.2 | 8.1 | 80.1 | 70.32 | 759.28 | |
| GMP-17 | 7/1/2008 | 0.0 | 0.0 | 1.3 | 18.6 | 80.1 | 71.06 | 758.54 | |
| GMP-17 | 7/8/2008 | 0.0 | 17.3 | 10.9 | 0.5 | 71.3 | 71.41 | 758.19 | |
| GMP-17 | 7/14/2008 | 0.1 | 6.7 | 12.0 | 1.4 | 80.0 | 71.54 | 758.06 | |
| GMP-17 | 7/29/2008 | 0.0 | 13.5 | 11.7 | 0.7 | 73.9 | 71.83 | 757.77 | |
| GMP-17 | 8/5/2008 | 0.0 | 0.0 | 2.5 | 16.7 | 80.7 | 71.97 | 757.63 | |
| GMP-17 | 8/19/2008 | 0.0 | 0.0 | 4.6 | 15.5 | 79.9 | 72.20 | 757.40 | |
| GMP-17 | 9/9/2008 | 0.0 | 0.0 | 3.2 | 16.5 | 80.4 | 72.15 | 757.45 | |
| GMP-17 | 10/6/2008 | 0.0 | 0.0 | 12.2 | 4.5 | 83.5 | 71.15 | 758.45 | |
| GMP-17 | 10/17/2008 | 0.0 | 0.0 | 8.4 | 9.1 | 81.2 | 71.30 | 758.30 | |

# Probes with Exceedances
## Mallard Lake

| Probe | Date | Static Pressure (inches H2O) | Methane (%) | Carbon Dioxide (%) | Oxygen (%) | Balance Gas (%) | Depth to Water (bMV) | Elevation of Groundwater Surface (ft MSL) | Qualifier |
|---|---|---|---|---|---|---|---|---|---|
| GMP-17 | 10/31/2008 | 0.0 | 0.0 | 1.4 | 19.1 | 79.5 | 70.25 | 759.35 | |
| GMP-17 | 11/18/2008 | 0.0 | 0.0 | 1.3 | 19.2 | 79.5 | 70.97 | 758.63 | |
| GMP-17 | 12/2/2008 | 0.0 | 0.0 | 11.2 | 8.1 | 80.2 | 70.58 | 759.02 | |
| GMP-17 | 12/12/2008 | 0.0 | 0.0 | 11.6 | 8.6 | 79.5 | 70.70 | 758.90 | |
| GMP-17 | 1/12/2009 | 0.0 | 7.5 | 11.6 | 5.3 | 75.6 | 60.80 | 768.80 | |
| GMP-17 | 1/27/2009 | 0.0 | 0.2 | 9.7 | 12.3 | 77.6 | 63.43 | 766.17 | |
| GMP-17 | 2/3/2009 | 0.1 | 11.3 | 12.2 | 0.0 | 76.6 | 64.16 | 765.35 | |
| GMP-17 | 2/4/2009 | 0.1 | 0.3 | 2.6 | 18.4 | 78.7 | 64.92 | 764.59 | |
| GMP-17 | 2/5/2009 | 0.0 | 0.0 | 10.8 | 6.7 | 82.5 | 64.40 | 765.11 | |
| GMP-17 | 2/6/2009 | NM | NM | NM | NM | NM | NM | NM | |
| GMP-17 | 2/7/2009 | 0.0 | 19.4 | 10.5 | 2.7 | 67.4 | 64.15 | 765.36 | |
| GMP-17 | 2/8/2009 | 0.0 | 1.9 | 6.4 | 12.6 | 79.3 | 63.70 | 765.81 | |
| GMP-17 | 2/9/2009 | 0.1 | 0.1 | 10.7 | 7.3 | 82.2 | 62.95 | 766.56 | |
| GMP-17 | 2/13/2009 | 0.2 | 0.0 | 1.8 | 19.5 | 78.8 | 56.71 | 772.80 | |
| GMP-17 | 2/16/2009 | 0.0 | 0.0 | 2.2 | 19.2 | 78.7 | 56.50 | 773.10 | |
| GMP-17 | 2/18/2009 | 0.0 | 0.0 | 1.4 | 20.0 | 78.5 | 55.15 | 774.36 | |
| GMP-17 | 2/23/2009 | 0.0 | 0.0 | 0.3 | 20.4 | 79.9 | 57.63 | 771.88 | |
| GMP-17 | 2/25/2009 | 0.0 | 0.0 | 6.6 | 13.8 | 79.8 | 56.62 | 772.89 | |
| GMP-17 | 2/26/2009 | 0.1 | 0.0 | 8.4 | 11.2 | 80.4 | 56.81 | 772.70 | |
| GMP-17 | 3/3/2009 | 0.0 | 0.0 | 6.5 | 15.0 | 78.5 | 45.50 | 784.10 | |
| GMP-17 | 3/10/2009 | -0.3 | 0.0 | 2.3 | 18.1 | 79.4 | 37.25 | 792.26 | |
| GMP-17 | 3/11/2009 | 0.1 | 0.0 | 0.3 | 20.9 | 79.8 | 17.94 | 811.57 | |
| GMP-17 | 3/16/2009 | 0.0 | 0.1 | 1.4 | 18.6 | 79.9 | 44.72 | 784.88 | |
| GMP-17 | 3/27/2009 | 0.0 | 0.0 | 5.1 | 12.9 | 82.0 | 52.38 | 777.13 | |
| GMP-17 | 4/7/2009 | 0.0 | 0.0 | 1.9 | 18.4 | 79.7 | 47.80 | 781.80 | |
| GMP-17 | 4/20/2009 | 0.0 | 0.0 | 3.2 | 15.8 | 81.0 | 51.32 | 778.28 | |
| GMP-17 | 5/4/2009 | 0.0 | 0.0 | 7.4 | 9.8 | 82.3 | 43.65 | 785.95 | |
| GMP-17 | 5/18/2009 | 0.0 | 0.0 | 4.9 | 8.6 | 86.5 | 54.62 | 774.98 | |
| GMP-17 | 6/17/2009 | 0.0 | 0.0 | 10.2 | 2.5 | 87.3 | 67.15 | 762.45 | |
| GMP-17 | 7/1/2009 | 0.0 | 4.0 | 9.9 | 1.5 | 84.6 | 65.97 | 763.63 | |
| GMP-17 | 7/13/2009 | -12.3 | 7.1 | 11.9 | 1.1 | 79.8 | 68.99 | 760.61 | |
| GMP-17 | 7/27/2009 | 0.0 | 10.6 | 9.8 | 0.7 | 78.9 | 70.52 | 759.08 | |
| GP-D | 10/17/2008 | 0.0 | 0.0 | 0.2 | 21.1 | 78.7 | 65.31 | 758.02 | |
| GP-D | 10/31/2008 | 0.0 | 0.0 | 0.3 | 20.8 | 78.9 | 65.07 | 758.26 | |
| GP-D | 11/18/2008 | -0.5 | 0.0 | 0.3 | 21.1 | 78.6 | 65.03 | 758.30 | |
| GP-D | 12/2/2008 | 0.0 | 0.0 | 0.2 | 20.3 | 79.5 | 64.57 | 758.76 | |
| GP-D | 12/6/2008 | NM | 11.6 | 5.0 | 3.0 | 80.4 | NM | NM | Collected by GRS personnel |

# Probes with Exceedances
## Mallard Lake

| Probe | Date | Static Pressure (inches H2O) | Methane (%) | Carbon Dioxide (%) | Oxygen (%) | Balance Gas (%) | Depth to Water (bMV) | Elevation of Groundwater Surface (ft MSL) | Qualifier |
|---|---|---|---|---|---|---|---|---|---|
| GP-D | 12/11/2008 | NM | 0.0 | 0.5 | 20.9 | 78.6 | NM | NM | Collected by GRS personnel |
| GP-D | 12/12/2008 | -0.1 | 0.0 | 0.3 | 20.2 | 79.4 | 64.65 | 758.68 | |
| GP-D | 1/12/2009 | 0.0 | 26.2 | 5.0 | 2.4 | 66.5 | 64.03 | 759.30 | |
| GP-D | 1/27/2009 | -0.4 | 0.0 | 0.3 | 20.6 | 79.1 | 63.97 | 759.36 | |
| GP-D | 2/16/2009 | -3.8 | 29.2 | 5.6 | 0.0 | 65.1 | 63.78 | 759.55 | |
| GP-D | 3/3/2009 | NM | NM | NM | NM | NM | 0.00 | 823.33 | Gas composition not taken due to WL |
| GP-D | 3/16/2009 | 1.4 | 21.9 | 4.5 | 3.2 | 70.4 | 63.43 | 759.90 | |
| GP-D | 4/7/2009 | 1.4 | 21.0 | 2.3 | 6.7 | 70.0 | 64.33 | 759.00 | |
| GP-D | 4/20/2009 | 2.1 | 28.1 | 3.9 | 2.1 | 65.9 | 62.72 | 760.61 | |
| GP-D | 5/4/2009 | 0.6 | 29.0 | 3.4 | 2.8 | 65.3 | 62.74 | 760.59 | |
| GP-D | 5/18/2009 | 0.0 | 0.0 | 0.1 | 20.3 | 79.6 | 63.41 | 759.92 | |
| GP-D | 6/17/2009 | 0.0 | 29.1 | 3.0 | 3.0 | 64.9 | 51.05 | 772.28 | |
| GP-D | 7/1/2009 | 1.0 | 32.0 | 3.1 | 1.6 | 63.4 | 62.90 | 760.43 | |
| GP-D | 7/13/2009 | -17.7 | 8.3 | 0.9 | 16.1 | 75.4 | NM | NM | |
| GP-D | 7/24/2009 | 0.0 | 24.0 | 2.2 | 6.8 | 68.0 | 63.23 | NM | |
| GP-D | 7/25/2009 | 0.1 | 24.7 | 2.0 | 7.0 | 66.3 | NM | NM | |
| GP-D | 7/26/2009 | 0.0 | 26.6 | 2.4 | 5.7 | 65.3 | NM | NM | |
| GP-D | 7/27/2009 | -0.2 | 28.9 | 2.7 | 4.1 | 64.4 | NM | NM | |
| W-19 | 4/10/2008 | 0.0 | 42.2 | 14.8 | 0.4 | 42.9 | NM | NM | |
| W-19 | 4/14/2008 | 0.0 | 20.2 | 9.4 | 3.4 | 66.6 | NM | NM | |
| W-19 | 4/16/2008 | 0.0 | 17.5 | 9.6 | 3.5 | 69.3 | NM | NM | |
| W-19 | 4/22/2008 | 0.0 | 27.0 | 13.1 | 0.7 | 59.1 | NM | NM | |
| W-19 | 4/29/2008 | 0.0 | 12.3 | 12.8 | 3.6 | 71.2 | NM | NM | |
| W-19 | 5/6/2008 | 0.0 | 17.0 | 14.4 | 1.2 | 67.5 | NM | NM | |
| W-19 | 5/13/2008 | 0.0 | 18.2 | 14.2 | 1.8 | 65.9 | NM | NM | |
| W-19 | 5/28/2008 | 0.4 | 6.0 | 11.4 | 6.8 | 75.0 | NM | NM | |
| W-19 | 6/3/2008 | 0.0 | 19.0 | 16.2 | 0.9 | 63.6 | NM | NM | |
| W-19 | 6/10/2008 | 0.0 | 6.9 | 9.2 | 8.3 | 75.7 | NM | NM | |
| W-19 | 6/16/2008 | 0.0 | 6.7 | 9.7 | 7.5 | 76.1 | NM | NM | |
| W-19 | 6/23/2008 | 0.0 | 4.0 | 4.9 | 13.9 | 77.1 | NM | NM | |
| W-19 | 7/1/2008 | 0.0 | 10.0 | 12.0 | 6.4 | 71.5 | NM | NM | |
| W-19 | 7/8/2008 | 0.0 | 10.8 | 14.6 | 3.3 | 71.4 | NM | NM | |
| W-19 | 7/14/2008 | 0.0 | 16.4 | 16.6 | 1.1 | 65.7 | NM | NM | |
| W-19 | 7/29/2008 | 0.0 | 15.3 | 16.6 | 1.4 | 66.5 | NM | NM | |
| W-19 | 8/5/2008 | 0.0 | 11.7 | 17.1 | 2.0 | 69.1 | NM | NM | |
| W-19 | 8/19/2008 | 0.0 | 16.8 | 18.3 | 0.8 | 64.2 | NM | NM | |
| W-19 | 9/9/2008 | 0.0 | 19.8 | 20.0 | 0.0 | 60.3 | NM | NM | |

# Probes with Exceedances

## Mallard Lake

| Probe | Date | Static Pressure (inches H2O) | Methane (%) | Carbon Dioxide (%) | Oxygen (%) | Balance Gas (%) | Depth to Water (bMV) | Elevation of Groundwater Surface (ft MSL) | Qualifier |
|---|---|---|---|---|---|---|---|---|---|
| W-19 | 9/23/2008 | 0.0 | 14.1 | 11.6 | 0.4 | 73.8 | NM | NM | |
| W-19 | 9/26/2008 | 0.0 | 22.2 | 13.0 | 0.1 | 64.8 | NM | NM | No Valve |
| W-19 | 10/6/2008 | 0.0 | 21.0 | 16.5 | 0.2 | 64.5 | NM | NM | |
| W-19 | 10/17/2008 | 0.0 | 25.6 | 17.3 | 0.1 | 57.2 | NM | NM | |
| W-19 | 10/31/2008 | 0.0 | 18.5 | 17.4 | 0.4 | 63.8 | NM | NM | |
| W-19 | 11/18/2008 | 0.0 | 19.8 | 18.4 | 0.3 | 61.2 | NM | NM | |
| W-19 | 12/2/2008 | 0.0 | 23.3 | 19.5 | 0.2 | 57.0 | NM | NM | |
| W-19 | 1/12/2009 | 0.0 | 20.1 | 13.9 | 1.2 | 64.5 | NM | NM | |
| W-19 | 1/27/2009 | 0.0 | 26.6 | 17.1 | 0.4 | 56.1 | NM | NM | |
| W-19 | 2/16/2009 | 0.0 | 16.6 | 13.2 | 0.0 | 70.1 | NM | NM | |
| W-19 | 3/3/2009 | 0.0 | 0.5 | 9.8 | 3.9 | 86.3 | NM | NM | |
| W-19 | 3/13/2009 | 0.0 | 0.0 | 6.2 | 6.8 | 87.0 | NM | NM | No valve |
| W-19 | 3/16/2009 | 0.0 | 0.2 | 6.6 | 6.7 | 86.5 | NM | NM | |
| W-19 | 4/7/2009 | 0.0 | 2.0 | 8.5 | 4.0 | 85.5 | NM | NM | |
| W-19 | 4/20/2009 | 0.0 | 10.9 | 13.2 | 0.0 | 75.9 | NM | NM | |
| W-19 | 5/4/2009 | 0.0 | 1.0 | 3.2 | 11.6 | 84.2 | NM | NM | |
| W-19 | 5/18/2009 | 0.0 | 18.5 | 12.9 | 0.7 | 67.9 | NM | NM | |

# Appendix B

# Fortistar Methane Data (November 2007 to July 2009)

## Mallard Lake Landfill - Methane Concentrations (in % by volume)

| Well_ID | Nov-07 | Dec-07 | Jan-08 | Feb-08 | Mar-08 | Apr-08 | May-08 | Jun-08 | Jul-08 | Aug-08 | Sep-08 | Oct-08 | Nov-08 | Dec-08 | Jan-09 | Feb-09 | Mar-09 | Apr-09 | May-09 | Jun-09 | Jul-09 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 11A | 0 | 0 | 0 | 0 | 0 | 0 | 0.2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 2E | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.1 | 0 | 0 | 0 | 0 | 0 |
| 6D | 0 | 0 | 0 | 0 | | 0.1 | 0.2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.1 | 0.1 | 0 | 0 | 0 |
| 7A | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 8C | 0 | 0 | 0 | 0 | 0 | 0 | 0.2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| E1 | 75.5 | 75.1 | 76.8 | 78.2 | 75 | 71.6 | 0.1 | 71.1 | 74.3 | 13 | 22.9 | 15.7 | 32.8 | 21.9 | 67.1 | 69.4 | 18.1 | 0 | 69 | 0.1 | |
| GMP-12 | | | | | | | | | | 0 | 0 | 0 | 0 | 0 | 0 | | | | | | |
| GMP-13 | 64.2 | 78.7 | 93.2 | 67.7 | 90.8 | 86.6 | 83.7 | 0 | 0 | 0 | 66.3 | 75.5 | 0 | 80 | 80.9 | 0 | 0 | 0 | 1.5 | 0 | 0 |
| GMP-14 | 8.7 | 2.5 | 1.3 | 0 | 1.2 | 1.2 | 1.1 | 14.4 | 3.3 | 0 | 0 | 0 | 0.2 | 0.2 | 63.2 | 0 | 0.1 | 6.5 | 15.0 | 49 | 36.6 |
| GMP-15 | 89.5 | 90.4 | 91.4 | 90.6 | 82.4 | 88.1 | 90 | 92.8 | 94 | 91.8 | 93.8 | 92.2 | 91.4 | 2.8 | 91 | 91.4 | 91.4 | 92.4 | 91.8 | 0 | 0 |
| GMP-16A | 0 | 0 | 0 | 0 | 0 | 0.1 | 0.1 | 0 | 0 | 0 | 0 | 0 | 0.2 | 0 | 0 | 0.6 | 0.3 | 0.1 | 0 | 0.4 | 0 |
| GMP-17 | 9.6 | 7.1 | 3 | 8.2 | 0.9 | 3.5 | 7 | 0 | 4.6 | 0 | 0 | 5.4 | 0 | 0 | 22.5 | 0 | 0 | 0 | 0 | 0.1 | 10.2 |
| GMP-19 | 0 | 0 | 0 | 0 | 0 | 0.1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.2 | | 0 | 0 | 0 |
| GMP-21 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | 0 | | 0 | 0 | 0 |
| GMP-23 | 0 | 0 | 0 | 0 | 0 | 0.2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | 0 | | 0 | 0 | |
| GP-2 | 0 | 0 | 0 | 0 | 0 | 0 | 0.2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| GP-A | 0 | 0 | 0 | 0 | 0.1 | 0 | 0.1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.2 | 0 | 0 | 0 | 0 | 0.2 | |
| GP-C | 75.9 | 54.3 | 32.5 | | 37.5 | 14.5 | 2.3 | 14.3 | 13.3 | 0 | 4.4 | 9.1 | 5.4 | 0 | 30.3 | 0 | 22.7 | 23.2 | 5.6 | 5.3 | 0 |
| GP-D | 13.4 | 0 | 0 | 0 | 0 | 0.1 | 0.1 | 0 | 0 | 10.2 | 0 | 5.6 | 0 | 0.1 | 23.7 | 22.8 | 0.2 | 33.9 | 35.0 | 35.6 | 32.8 |
| GP-E | 90.7 | 89.1 | 93.2 | 93.1 | 90.5 | 90.3 | 98 | 0 | 6.1 | 0 | 0 | 0 | 0.4 | 0 | 0.2 | 0.1 | 0 | 0 | 32.8 | 35.2 | |
| GP-F | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.2 | 0.1 | 0.2 | 0 | 0 | 0 | |
| GP-G | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.1 | 0.1 | 0 | 0 | 0.2 | 0.5 | 0.1 | 0.1 | 0 | |
| GP-H | 31.1 | 0 | 72.3 | 52.7 | 64.2 | 74 | 36.8 | 0 | 0 | 64.1 | 15.7 | 74.6 | 74.9 | 0 | 5.4 | 18.7 | 54.8 | 71.8 | 76.5 | 80.8 | |
| GP-Is | 2.7 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3.2 | 8.1 | 7.9 | 9.2 | 0 | 0 | 0.1 | 0 | 0 | 0.1 | 0 | |
| GP-J | 0 | 0 | 0 | 0 | 0 | 0.2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| GP-K | 0 | 0 | 0 | 0 | 0.1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.1 | 0 | 0 | 0 | |
| GP-L | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.1 | 0 | 0 | 0 | 0 | |
| GP-M | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.4 | 0.1 | 0 | 0 | 0 | 0 | |
| GP-N | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.2 | 0.1 | 0 | 0 | 0 | 0 | |
| GP-P | 0 | 0 | 0 | 0 | 0 | 0 | 0.2 | 0 | 0 | 0 | 0 | 0 | 0.1 | 0 | 0.5 | 0.7 | 0.2 | 0 | 0 | 0 | 0 |
| GP-Q | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| GP-R | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| GP-S | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| GP-U | 48.7 | 51 | 61.6 | 54.7 | 21.8 | 6.4 | 10.1 | 6.3 | 10.9 | 4.6 | 10.2 | 18.4 | 22.8 | 6.9 | 21.9 | 6 | 4.5 | 5.5 | 2.2 | 1.1 | 0.9 |
| GP-V | 0 | 0 | 0 | | 0 | 0.2 | 0.1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.2 | 27 | 30.2 | 0 | 0.1 | 0 |
| GP-X | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | | | | | | | | | | | | | | | | | | | | | |
| 11B | 0 | 0 | 0 | 0 | 0 | 0 | 0.2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 11C | 0 | 0 | 0 | 0 | 0 | 0 | 0.1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 11D | 0 | 0 | 0 | 0 | 0 | 0 | 0.1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 11E | 0 | 0 | 0 | 0 | 0 | 0 | 0.1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 2A | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.1 | 0.6 | 0 | 0 | 0 | 0 | 0 |
| 2B | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.3 | 0 | 0 | 0 | 0 | 0 |
| 2C | 5.6 | 5.4 | 14.8 | 26.6 | 32.1 | 15.6 | 8.6 | 9.6 | 19.6 | 2.5 | 20.4 | 15.5 | 20.4 | 54.2 | 0 | 18.4 | 0.5 | 0.4 | 0 | 0 | 22.7 |
| 2D | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.1 | 0 | 0 | 0.2 | 0.2 | 0 | 0 | 0 | 0 |
| 2F | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.1 | 0 | 0 | 0 | 0 | 0 |
| 6A | 0 | 0 | 0 | 0 | 0 | 0 | 0.1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.4 | 0 | 0 | 0 | 0 |
| 6B | 81.2 | 82.5 | 88.6 | 86.8 | 87.9 | 73.5 | 88.3 | 67.4 | 0 | 0 | 7.3 | 0 | 16.9 | 81.1 | 51.4 | 83.6 | 84 | 82 | 0 | 63.1 | 0 |
| 6C | 0 | 0 | 0 | 0 | 0.1 | 0 | 0.2 | 0 | 0 | 0 | 0 | 0 | 0.1 | 0 | 0 | 0.2 | 0.5 | 0.5 | 0 | 0.3 | 0 |
| 7B | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 8A | 0 | 0 | 0 | 0 | 0 | 0 | 0.1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 8B | 0 | 0 | 0 | 0 | 0 | 0 | 0.2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 8D | 0 | 0 | 0 | 0 | 0 | 0 | 0.1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 8E | 0 | 0 | 0 | 0 | 0 | 0 | 0.1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 8F | 0 | 0 | 0 | 0 | 0 | 0 | 0.1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| GMP-16B | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.1 | 0 |
| GMP-16C | 37.7 | 32.6 | 5.9 | 0 | 0 | 0.1 | 0.3 | 0 | 0 | 1.3 | 3.9 | 3.1 | 0.9 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| GP-Id | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.1 | 0 | 0 | 0 | 0 | |
| W-16 | 0 | 0 | 0 | 0 | 0 | 0 | 0.1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| W-17 | 0 | 0 | 0 | 0 | 0 | 0 | 0.1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| W-18 | 0 | 0 | 0 | 0 | 0 | 0 | 0.1 | 0 | 0 | 0 | 0 | 0 | 0.2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| GX-9 | | | | | 98.5 | 97 | 99.9 | 0 | 89.1 | | 74.8 | 75.4 | 80 | 75.8 | 72.3 | 14.1 | 0 | 0 | 71.1 | 70.3 | 64.2 |
| AMB-1 | 0 | 0 | | | | | | | | | | | | 0 | | | | | | | |
| AMB-2 | 0 | 0 | | | | | | | | | | | | 0 | | | | | | | |
| AMB-3 | 0 | 0 | | | | | | | | | | | | 0 | | | | | | | |
| AMB-4 | 0 | 0 | | | | | | | | | | | | 0 | | | | | | | |

# Appendix C

# Active System Well Data

**The data in Appendix C is from a summary of construction data through 2006. Additional construction has occurred and this table will be updated as part of the review to have all the information in one location.**

# Mallard Lake Landfill
## Gas Extraction Well Details



| Well ID | Perf. Pipe | Solid Pipe | Total Depth (feet) | Pipe ID | Well Scoped | Well Obstructed At | Original Construction | Latest Redrill |
|---|---|---|---|---|---|---|---|---|
| 2 | 40 | 23 | 63 | 8" | | | 01/21/86 | |
| 3B | 47 | 23 | 70 | 6" | | | 01/23/86 | 8/5/04 |
| 4 | 40 | 15 | 55 | 8" | 2004 | 45 (liq) | 01/23/86 | |
| 5A | 40 | 30 | 70 | 6" | | | 01/29/86 | 8/5/04 |
| 5B | 30 | 23 | 53 | 8" | 2004 | 46 | 01/30/86 | |
| 6 | 45 | 20 | 65 | 8" | 2004 | n/a | 01/31/86 | |
| 8 | 40 | 30 | 70 | 6" | | | 02/17/86 | 7/14/04 |
| 9 | 50 | 20 | 70 | 8" | | | 02/18/86 | |
| 10 | 40 | 20 | 60 | 8" | | | 02/18/86 | 2003 |
| 11 | 46 | 30 | 76 | 6" | | | 02/22/86 | 7/13/04 |
| 23 | 41 | 18 | 59 | 6" | | | 09/12/89 | |
| 24 | 34 | 30 | 64 | 6" | | | 09/14/89 | 7/13/04 |
| 28 | 109 | 30 | 139 | 6" | | | 10/09/89 | 6/25/04 |
| 29 | 106 | 30 | 136 | 6" | | | 09/28/89 | 6/28/04 |
| 30 | 72 | 15 | 87 | 6" | | | 10/19/89 | |
| 31 | 35 | 15 | 50 | 6" | | | 09/09/89 | 2003 |
| 32 | 33 | 15 | 48 | 6" | | | 09/08/89 | 2003 |
| 33 | 25 | 16 | 41 | 6" | | | 08/31/89 | |
| 34 | 23.5 | 14 | 37.5 | 6" | | | 08/30/89 | |
| 35 | 43 | 30 | 73 | 6" | | | 10/29/89 | 7/29/04 |
| 36 | 119 | 30 | 149 | 6" | | | 09/05/89 | 7/6/04 |
| 37 | 73 | 30 | 103 | 6" | | | 10/21/89 | 7/14/04 |
| 38 | 27 | 11 | 38 | 6" | | | 09/08/89 | 2002 |
| 39 | 30.5 | 16 | 46.5 | 6" | 2004 | 38 (liq) | 08/30/89 | |
| 40 | 37 | 15 | 52 | 6" | 2004 | 38 | 10/23/89 | |
| 41 | 33 | 17 | 50 | 6" | | | 08/29/89 | |
| 42 | 58 | 30 | 88 | 6" | | | 10/24/89 | 8/5/04 |
| 43 | 24 | 17 | 41 | 6" | | | 08/28/89 | |
| 45 | 65 | 32.5 | 97.5 | 6" | | | 02/08/93 | 2003 |
| 46 | 35 | 18 | 53 | 6" | | | 08/26/89 | 2003 |
| 49 | 35 | 17 | 52 | 6" | | | 08/25/89 | |
| 50 | 30 | 15 | 45 | 6" | | | 09/11/89 | |
| 55 | 50 | 29.9 | 79.9 | 6" | 2004 | 71 | 07/14/93 | |
| 60 | 118.5 | 61.3 | 179.8 | 6" | | | | 2003 |
| 61 | 152 | 30 | 182 | 6" | | | | 6/25/04 |
| 62 | 167 | 30 | 197 | 6" | | | | 6/23/04 |
| 63 | 173 | 25 | 198 | 10" | | | 12/15/98 | 1999 |
| 64 | 140 | 30 | 170 | 6" | | | | 6/28/04 |
| 65 | 164 | 25 | 189 | 10" | 2004 | 100 (liq) | 12/22/98 | 1999 |
| 66 | 31 | 30 | 61 | 6" | | | 07/12/93 | 7/13/04 |
| 67 | 85 | 30 | 115 | 6" | | | 01/08/93 | 7/7/04 |
| 68 | 103 | 30 | 133 | 6" | | | 01/14/93 | 7/7/04 |
| 69 | 103 | 30 | 133 | 6" | | | 12/22/92 | 7/6/04 |
| 70 | 159 | 25 | 184 | 10" | 2004 | 131 (liq) | 01/30/99 | 1999 |
| 71 | 157 | 25 | 182 | 10" | 2004 | 107 (liq) | 02/04/99 | 1999 |
| 72 | 33 | 30 | 63 | 6" | | | 07/13/93 | 7/9/04 |
| 73 | 54 | 30 | 84 | 6" | | | 07/13/93 | 7/9/04 |
| 74 | 102 | 30 | 132 | 6" | | | 12/23/92 | 7/8/04 |
| 75 | 163 | 25 | 188 | 10" | 2004 | 139 (liq) | 02/02/99 | 1999 |
| 76 | 51.5 | 34.3 | 85.8 | 6" | 2004 | 81 | 07/14/93 | |

# Mallard Lake Landfill
## Gas Extraction Well Details



| Well ID | Perf. Pipe | Solid Pipe | Total Depth (feet) | Pipe ID | Well Scoped | Well Obstructed At | Original Construction | Latest Redrill |
|---|---|---|---|---|---|---|---|---|
| 77 | 79 | 46.7 | 125.7 | 6" | 2004 | 100 | 07/09/93 | |
| 78 | 119 | 30 | 149 | 6" | 2005 | none | 12/11/92 | 6/29/04 |
| 79 | 54 | 32.6 | 86.6 | 6" | 2004 | 74 | 07/14/93 | |
| 80 | 57 | 36.4 | 93.4 | 6" | 2004 | 72 (liq) | 07/02/93 | |
| 81 | 61 | 30 | 91 | 6" | | | 07/02/93 | 7/21/04 |
| 82 | 72 | 30 | 102 | 6" | | | 07/07/93 | 7/22/04 |
| 83 | 109 | 30 | 139 | 6" | | | 12/07/92 | 7/21/04 |
| 84 | 102.6 | 54.4 | 157 | 6" | | | 12/03/92 | |
| 85 | 52 | 30 | 82 | 6" | | | 07/07/93 | 7/26/04 |
| 86 | 73 | 30 | 103 | 6" | | | 12/01/92 | 7/19/04 |
| 87 | 51 | 30 | 81 | 6" | | | 11/18/92 | 7/20/04 |
| 88 | 79 | 30 | 109 | 6" | | | 12/01/92 | 7/19/04 |
| 89 | 43 | 30 | 73 | 6" | | | 11/17/92 | 7/22/04 |
| 91 | 39 | 30 | 69 | 6" | | | 11/16/92 | 7/23/04 |
| 92 | 36 | 30 | 66 | 6" | | | 11/04/92 | 7/23/04 |
| 93 | 44 | 30.6 | 74.6 | 6" | | | 10/30/92 | |
| 94 | 42 | 29.6 | 71.6 | 6" | | | 10/30/92 | |
| 95 | 73.2 | 44.2 | 117.4 | 6" | | | 12/09/92 | |
| 96 | 32 | 21.6 | 53.6 | 6" | 2004 | 39 | 10/28/92 | |
| 97 | 42 | 30 | 72 | 6" | | | 10/30/92 | 7/28/04 |
| 98 | 91 | 30 | 121 | 6" | | | 12/04/92 | 7/27/04 |
| 99 | 10 | 30 | 40 | 6" | | | 10/28/92 | 7/29/04 |
| 100 | 40 | 30 | 70 | 6" | | | 10/29/92 | 7/29/04 |
| 101 | 23 | 16 | 43 | 10" | | | 07/03/97 | |
| 102 | 29 | 16 | 49 | 10" | | | 07/03/97 | |
| 103 | 38 | 15 | 57 | 10" | | | 07/03/97 | |
| 104 | 43 | 22 | 69 | 10" | | | 07/11/97 | |
| 105 | 47 | 23 | 74 | 10" | 10/05 | 45' | 07/10/97 | |
| 106 | 51 | 25 | 80 | 10" | | | 07/03/97 | |
| 107 | 56 | 25 | 85 | 10" | | | 07/03/97 | |
| 108 | 44 | 22 | 70 | 10" | | | 07/03/97 | |
| 109 | 41 | 21 | 66 | 10" | | | 07/02/97 | |
| 110 | 39 | 20 | 63 | 10" | | | 07/02/97 | |
| 111 | 42 | 21 | 67 | 10" | | | 07/02/97 | |
| 112 | 41 | 21 | 66 | 10" | | | 07/01/97 | |
| 113 | 35 | 21 | 56 | 8" | 8/2006 | 28' | 07/01/97 | 2003 |
| 114 | 32 | 16 | 52 | 10" | | | 07/01/97 | |
| 115 | 34 | 17 | 55 | 10" | | | 07/01/97 | |
| 116 | 39 | 20 | 63 | 10" | | | 06/30/97 | |
| 117 | 37 | 19 | 60 | 10" | | | 06/27/97 | |
| 118 | 60 | 25 | 85 | 8" | | | 07/02/97 | 2003 |
| 119 | 37 | 18 | 59 | 10" | 2004 | 42 | 06/27/97 | |
| 120 | 37 | 22 | 63 | 10" | | | 06/27/97 | |
| 121 | 91 | 29 | 124 | 10" | 2004 | 70-115 | 07/01/97 | |
| 122 | 35 | 21 | 60 | 10" | | | 06/27/97 | |
| 123 | 85 | 25 | 110 | 8" | | | | 2003 |
| 124 | 39 | 24 | 67 | 10" | 2006 | | 06/26/97 | |
| 125 | 37 | 22 | 63 | 10" | | | 06/26/97 | |
| 126 | 98 | 29 | 127 | 8" | 10/05 | 27 | 06/27/97 | 2003 |
| 127 | 39 | 23 | 66 | 10" | | | 06/26/97 | |

# Mallard Lake Landfill
## Gas Extraction Well Details



| Well ID | Perf. Pipe | Solid Pipe | Total Depth (feet) | Pipe ID | Well Scoped | Well Obstructed At | Original Construction | Latest Redrill |
|---|---|---|---|---|---|---|---|---|
| 128 | 39 | 23 | 66 | 10" | | | 06/26/97 | |
| 129 | 102 | 29 | 135 | 10" | 2004 | 90 | 06/26/97 | |
| 130 | 41 | 25 | 70 | 10" | | | 06/24/97 | |
| 131 | 36 | 22 | 62 | 10" | 2004 | | 06/24/97 | |
| 132 | 43 | 26 | 73 | 10" | 2004 | 57 | 06/24/97 | |
| 133 | 86 | 29 | 119 | 10" | 2003 | | 06/24/97 | |
| 134 | 41 | 21 | 66 | 10" | 2004 | 61 | 06/23/97 | |
| 135 | 34 | 17 | 55 | 10" | | | 06/23/97 | |
| 136 | 59 | 30 | 89 | 6" | | | 06/23/97 | 8/6/04 |
| 137 | 118 | 25 | 147 | 10" | | | 06/16/97 | |
| 138 | 26 | 15 | 45 | 10" | | | 06/13/97 | |
| 139 | 35 | 30 | 65 | 6" | | | 06/20/97 | 2004 |
| 140 | 108 | 25 | 137 | 10" | | | 06/13/97 | |
| 141 | 21 | 15 | 40 | 10" | | | 06/13/97 | |
| 142 | 45 | 25 | 70 | 8" | 10/05 | 32 (liq) | 06/17/97 | 2003 |
| 143 | 101 | 25 | 130 | 10" | | | 06/12/97 | |
| 144 | 27 | 15 | 46 | 10" | | | 06/18/97 | |
| 145 | 36 | 18 | 58 | 10" | | | 06/18/97 | |
| 146 | 65 | 25 | 94 | 10" | | | 06/18/97 | |
| 147 | 40 | 20 | 64 | 10" | | | 06/18/97 | |
| 148 | 42 | 21 | 67 | 10" | | | 06/19/97 | |
| 149 | 89 | 25 | 118 | 10" | 2004 | 105 | 06/12/97 | |
| 150 | 39 | 19 | 62 | 10" | | | 06/19/97 | |
| 151 | 106 | 25 | 135 | 10" | 2004 | 125 | 06/10/97 | |
| 152 | 105 | 28 | 133 | 8" | | | 06/20/97 | 2003 |
| 153 | 53 | 25 | 82 | 10" | | | 06/19/97 | |
| 155 | 55 | 24 | 83 | 10" | | | 06/20/97 | |
| 156 | 101 | 25 | 130 | 10" | | | 06/09/97 | |
| 201 | 101 | 30 | 131 | 6" | 2003 | | 11/05/99 | 2004 |
| 202 | 107 | 25 | 132 | 8" | 2004 | | 11/02/99 | 2003 |
| 203 | 105 | 25 | 130 | 8" | | | 11/02/99 | 2003 |
| 204 | 72 | 25 | 97 | 8" | | | 11/03/99 | 2003 |
| 205 | 52 | 28 | 80 | 10" | | | 11/04/99 | |
| 206 | 93 | 29 | 122 | 10" | | | 11/04/99 | |
| 207 | 57 | 25 | 82 | 10" | 2003 | | 01/05/99 | |
| 208 | 108 | 29 | 137 | 10" | 10/05 | 106 (liq) | 11/05/99 | |
| 209 | 93 | 25 | 118 | 10" | 2004 | 57 (liq) | 11/13/99 | |
| 210 | 49 | 25 | 74 | 10" | 2004 | 50 (liq) | 11/16/99 | |
| 211 | 86 | 25 | 111 | 10" | | | 11/16/99 | |
| 212 | 80 | 25 | 105 | 10" | 2004 | 78 (liq) | 11/17/99 | |
| 213 | 113 | 25 | 138 | 10" | | | 01/21/99 | |
| 214 | 147 | 25 | 172 | 10" | 2004 | 95 (liq) | 01/21/99 | |
| 215 | 149 | 25 | 174 | 10" | | | 01/23/99 | |
| 216 | 109 | 25 | 134 | 10" | | | 11/25/99 | |
| 217 | 100 | 25 | 125 | 10" | | | 11/18/99 | |
| 218 | 147 | 29 | 176 | 10" | 2004 | 95 | 03/10/99 | |
| 219 | 140 | 28 | 168 | 6" | | | 03/01/99 | 2003 |
| 220 | 145 | 27 | 172 | 6" | | | 03/05/99 | 2003 |
| 221 | 141 | 29 | 170 | 10" | 10/05 | 50' | 03/04/99 | |
| 222 | 155 | 25 | 180 | 8" | | | ??? | 2003 |

# Mallard Lake Landfill
## Gas Extraction Well Details



| Well ID | Perf. Pipe | Solid Pipe | Total Depth (feet) | Pipe ID | Well Scoped | Well Obstructed At | Original Construction | Latest Redrill |
|---|---|---|---|---|---|---|---|---|
| 223 | 150 | 30 | 180 | 6" | | | 03/02/99 | 7/1/04 |
| 224 | 125 | 29 | 154 | 8" | | | 03/09/99 | 2003 |
| 225 | 133 | 29 | 162 | 6" | 2004 | | 03/11/99 | 2003 |
| 226 | 118 | 25 | 143 | 6" | | | 02/26/99 | 2003 |
| 227 | 135 | 29 | 164 | 6" | | | 03/12/99 | 2003 |
| 228 | 149 | 29 | 178 | 6" | | | 03/03/99 | 2003 |
| 229 | 71 | 29 | 100 | 8" | | | 03/17/99 | 2003 |
| 230 | 121 | 29 | 150 | 6" | | | 03/15/99 | 2003 |
| 231 | 71 | 29 | 100 | 10" | 2004 | no obstr | 03/17/99 | |
| 232 | 79 | 30 | 109 | 6" | | | 03/18/99 | 8/5/04 |
| 233 | 125 | 29 | 154 | 8" | | | 03/16/99 | 2003 |
| 234 | 80 | 29 | 109 | 8" | | | 03/16/99 | 2003 |
| 235 | 105 | 30 | 135 | 6" | | | 04/12/99 | 6/29/04 |
| 236 | 74 | 29 | 103 | 10" | | | 04/12/99 | |
| 237 | 79 | 29 | 108 | 10" | | | 04/14/99 | |
| 238 | 43 | 25 | 68 | 10" | | | 04/14/99 | |
| 239 | 98 | 29 | 127 | 10" | 2004 | 82 (liq) | 04/20/99 | |
| 240 | 67 | 29 | 96 | 10" | | | 04/13/99 | |
| 241 | 34 | 19 | 53 | 10" | | | 04/13/99 | |
| 242 | 34 | 21 | 55 | 10" | | | 04/14/99 | |
| 243 | 92 | 29 | 121 | 8" | | | 04/12/99 | 2003 |
| 244 | 75 | 29 | 104 | 8" | | | 04/11/99 | 2003 |
| 245 | 67 | 29 | 96 | 10" | 10/05 | 70 (liq) | 04/20/99 | |
| 246 | 31 | 19 | 50 | 10" | | no obstr | 04/14/99 | |
| 247 | 31 | 19 | 50 | 10" | | no obstr | 04/14/99 | |
| 248 | 95 | 25 | 120 | 8" | | | 04/15/99 | 2003 |
| 249 | 70 | 29 | 99 | 10" | 10/05 | 53' | 05/04/99 | |
| 250 | 31 | 19 | 50 | 10" | | no obstr | 04/14/99 | |
| 251 | 36 | 20 | 56 | 10" | | no obstr | 05/05/99 | |
| 252 | 109 | 30 | 139 | 6" | | | 04/19/99 | 8/2/04 |
| 253 | 72 | 29 | 101 | 10" | | | 04/19/99 | |
| 254 | 35 | 19 | 54 | 10" | | | 05/05/99 | |
| 255 | 106 | 30 | 136 | 6" | | | 05/07/99 | 7/30/04 |
| 256 | 60 | 29 | 89 | 10" | | | 04/27/99 | |
| 257 | 23 | 19 | 42 | 10" | | | 05/05/99 | |
| 258 | 27 | 19 | 46 | 10" | | | 05/05/99 | |
| 259 | 121 | 25 | 146 | 6" | | | 04/26/99 | 2003 |
| 260 | 66 | 28 | 94 | 10" | | | 05/07/99 | |
| 261 | 29 | 19 | 48 | 10" | | | 05/05/99 | |
| 262 | 114 | 25 | 139 | 10" | 2004 | 121 (liq) | 04/15/99 | |
| 263 | 90 | 18 | 108 | 10" | 2004 | 63 (liq) | 06/02/99 | |
| 264 | 52 | 16 | 68 | 10" | | | 05/07/99 | |
| 265 | 19 | 27 | 46 | 10" | 2004 | 41 (liq) | 05/10/99 | |
| 266 | 157 | 29 | 186 | 10" | | | 04/21/99 | |
| 267 | 131 | 30 | 161 | 6" | | | 04/26/99 | |
| 268 | 95 | 25 | 120 | 10" | 2004 | 100 | 05/10/99 | |
| 269 | 53 | 25 | 78 | 10" | | | 05/11/99 | |
| 270 | 21 | 15 | 36 | 10" | 2004 | no obstr | 05/10/99 | |
| 271 | 22 | 15 | 37 | 10" | 2004 | 36 | 05/10/99 | |
| 272 | 178 | 25 | 203 | 10" | 2004 | no obstr | 05/12/99 | |

# Mallard Lake Landfill
## Gas Extraction Well Details



| Well ID | Perf. Pipe | Solid Pipe | Total Depth (feet) | Pipe ID | Well Scoped | Well Obstructed At | Original Construction | Latest Redrill |
|---|---|---|---|---|---|---|---|---|
| 273 | 138 | 25 | 163 | 10" | | | 05/12/99 | |
| 274 | 122 | 25 | 147 | 10" | | | 05/25/99 | |
| 275 | 92 | 25 | 117 | 10" | 2004 | 119 (liq) | 05/11/99 | |
| 276 | 51 | 24 | 75 | 10" | | | 05/12/99 | |
| 277 | 20 | 15 | 35 | 10" | | | 05/21/99 | |
| 278 | 145 | 25 | 170 | 10" | | | 05/27/99 | |
| 279 | 93 | 25 | 118 | 10" | 10/05 | no obstr | 05/26/99 | |
| 280 | 40 | 18 | 58 | 10" | | | 05/21/99 | |
| 281 | 25 | 15 | 40 | 10" | | | 05/25/99 | |
| 282 | 38 | 18 | 56 | 10" | | | 06/01/99 | |
| 283 | 23 | 15 | 38 | 10" | | | 05/25/99 | |
| 284 | 146 | 25 | 171 | 10" | | | 06/07/99 | |
| 285 | 103 | 25 | 128 | 10" | 2004 | 97 (liq) | 06/01/99 | |
| 286 | 60 | 25 | 85 | 10" | | | | |
| 287 | 33 | 15 | 48 | 10" | | | 05/27/99 | |
| 288 | 129 | 30 | 159 | 6" | | | 06/07/99 | 7/8/04 |
| 289 | 78 | 25 | 103 | 10" | | | 05/28/99 | |
| 290 | 32 | 15 | 47 | 10" | | | 05/28/99 | |
| 291 | 125 | 25 | 150 | 10" | | | 06/10/99 | |
| 292 | 124 | 25 | 149 | 10" | | | 06/10/99 | |
| 293 | 73 | 25 | 98 | 10" | | | 06/11/99 | |
| 301 | | | | 6" | | | | |

# Tables

## Table 1 - GPT-11 Extraction Data

## Table 2 - Fortistar June 2009 Probe Data

# Table 1 - Summary of East Side Extraction

**Mallard Lake Landfill**
**Hanover Park, IL**
**AECOM Project No 13069-002**

| Probe | Date | Time of measurement | Static Pressure (inches H2O) | Methane (%) | Carbon Dioxide (%) | Oxygen (%) | Balance Gas (%) | Post Purge Pressure (inches H2O) | Depth to Water (bMV) | Elevation of Groundwater Surface (ft MSL) | Measured Flow |
|---|---|---|---|---|---|---|---|---|---|---|---|
| GP-H | 7/13/2009 | 12:56 | -11.6 | 70.1 | 3.2 | 0.4 | 26.0 | 0.7 | NM | NM | |
| GP-H | 7/23/2009 | 18:07 | -2.2 | 0.2 | 0.1 | 21.0 | 78.7 | -5.0 | NM | NM | |
| GP-H | 7/24/2009 | 10:21 | -0.8 | 0.0 | 0.0 | 20.0 | 80.0 | -16.0 | NM | NM | |
| GP-H | 7/24/2009 | 17:24 | -3.5 | 0.0 | 0.0 | 20.6 | 79.4 | -15.8 | NM | NM | |
| GP-H | 7/25/2009 | 9:47 | -0.1 | 0.0 | 0.0 | 20.8 | 79.2 | -14.3 | NM | NM | |
| GP-H | 7/25/2009 | 18:10 | 0.0 | 0.0 | 0.0 | 20.6 | 79.4 | -12.5 | NM | NM | |
| GP-H | 7/26/2009 | 6:55 | -2.6 | 0.0 | 0.0 | 20.6 | 79.4 | -14.9 | NM | NM | |
| GP-H | 7/26/2009 | 17:54 | -5.5 | 0.0 | 0.0 | 21.0 | 79.0 | -14.2 | NM | NM | |
| GP-H | 7/27/2009 | 7:04 | -3.8 | 0.0 | 0.0 | 20.8 | 79.2 | -19.4 | NM | NM | |
| GP-H | 7/27/2009 | 16:50 | -3.7 | 0.0 | 0.0 | 20.5 | 79.5 | -16.8 | NM | NM | |
| GP-H | 7/28/2009 | 14:12 | 0.1 | 0.0 | 0.0 | 20.1 | 79.9 | -12.8 | NM | NM | |
| GP-H | 7/29/2009 | 9:15 | -0.4 | 0.0 | 0.0 | 20.2 | 79.8 | -15.1 | NM | NM | |
| GP-H | 7/29/2009 | 17:09 | -4.0 | 0.0 | 0.0 | 20.5 | 79.5 | -16.4 | NM | NM | |
| GP-H | 7/30/2009 | 7:22 | -0.8 | 0.0 | 0.0 | 20.3 | 79.7 | -13.4 | NM | NM | |
| GP-H | 7/30/2009 | 18:05 | -1.4 | 0.0 | 0.0 | 20.4 | 79.6 | -16.4 | NM | NM | |
| GP-H | 7/31/2009 | 7:35 | -0.9 | 0.0 | 0.0 | 20.8 | 79.2 | -9.4 | NM | NM | |
| GP-H | 7/31/2009 | 17:01 | -2.5 | 0.0 | 0.0 | 19.9 | 80.1 | -16.3 | NM | NM | |
| GP-H | 8/1/2009 | 8:44 | 0.0 | 0.0 | 0.0 | 21.2 | 78.8 | -8.8 | NM | NM | |
| GP-H | 8/1/2009 | 16:22 | -0.6 | 0.0 | 0.0 | 19.9 | 80.1 | -13.6 | NM | NM | |
| GP-H | 8/2/2009 | 8:42 | -0.3 | 0.0 | 0.0 | 21.0 | 79.0 | -13.0 | NM | NM | |
| GP-H | 8/2/2009 | 17:15 | 0.0 | 0.0 | 0.0 | 19.7 | 80.3 | -14.6 | NM | NM | |
| GP-H | 8/3/2009 | 7:21 | 0.4 | 9.3 | 3.6 | 8.1 | 79.0 | -8.8 | NM | NM | |
| GP-H | 8/3/2009 | 17:00 | -0.3 | 21.5 | 3.0 | 4.0 | 71.5 | -14.0 | NM | NM | |
| GP-H | 8/4/2009 | 8:55 | 0.0 | 27.3 | 3.8 | 0.8 | 68.1 | -7.8 | NM | NM | |
| GP-H | 8/4/2009 | 17:00 | -0.8 | 0.0 | 0.0 | 19.6 | 80.4 | -13.7 | NM | NM | |
| GPT-11 | 7/13/2009 | 15:25 | -10.9 | 69.9 | 3.6 | 1.2 | 26.5 | 1.1 | 15.50 | 764.79 | |
| GPT-11 | 7/22/2009 | 14:00 | 0.8 | 75.8 | 3.6 | 0.5 | 19.9 | -9.8 | NM | NM | 12 SCFH |
| GPT-11 | 7/22/2009 | 19:20 | -63.2 | 45.9 | 2.0 | 8.2 | 44.1 | -68.2 | NM | NM | 12 SCFH |
| GPT-11 | 7/23/2009 | 7:00 | -0.2 | 79.1 | 3.5 | 0.0 | 17.4 | -10.5 | NM | NM | 10 SCFH |
| GPT-11 | 7/23/2009 | 18:05 | -4.1 | 80.3 | 3.2 | 0.1 | 16.4 | -15.9 | NM | NM | 10 SCFH |
| GPT-11 | 7/24/2009 | 6:40 | -0.5 | 78.1 | 3.3 | 0.4 | 18.2 | -6.2 | NM | NM | 20 SCFH |
| GPT-11 | 7/24/2009 | 17:24 | -31.9 | 66.1 | 3.0 | 4.0 | 26.9 | -38.5 | NM | NM | 2 SCFH |
| GPT-11 | 7/25/2009 | 9:42 | -0.2 | 59.8 | 3.2 | 3.2 | 33.8 | -7.0 | NM | NM | 10 SCFH |
| GPT-11 | 7/25/2009 | 18:15 | -1.6 | 73.7 | 3.2 | 0.4 | 22.6 | -11.4 | NM | NM | 10 SCFH |

# Table 1 - Summary of East Side Extraction

**Mallard Lake Landfill**
**Hanover Park, IL**
**AECOM Project No 13069-002**

| Probe | Date | Time of measurement | Static Pressure (inches H2O) | Methane (%) | Carbon Dioxide (%) | Oxygen (%) | Balance Gas (%) | Post Purge Pressure (Inches H2O) | Depth to Water (bMV) | Elevation of Groundwater Surface (ft MSL) | Measured Flow |
|---|---|---|---|---|---|---|---|---|---|---|---|
| GPT-11 | 7/26/2009 | 6:50 | -2.8 | 76.4 | 3.7 | 0.0 | 20.0 | -12.4 | NM | NM | 20 SCFH |
| GPT-11 | 7/26/2009 | 17:49 | -8.5 | 72.2 | 3.1 | 1.3 | 23.4 | -14.9 | NM | NM | 15 SCFH |
| GPT-11 | 7/27/2009 | 6:55 | -3.1 | 0.0 | 0.0 | 20.8 | 79.2 | -16.6 | NM | NM | 20 SCFH |
| GPT-11 | 7/27/2009 | -6.5 | -6.5 | 66.4 | 3.1 | 1.8 | 28.5 | -17.8 | NM | NM | 10 SCFH |
| GPT-11 | 7/28/2009 | 14:15 | 0.2 | 33.3 | 1.7 | 10.4 | 54.2 | -10.9 | NM | NM | N/A |
| GPT-11 | 7/29/2009 | 9:18 | -0.4 | 62.0 | 3.2 | 2.7 | 32.0 | -11.1 | NM | NM | 20 SCFH |
| GPT-11 | 7/29/2009 | 17:13 | -8.3 | 69.5 | 3.3 | 0.7 | 26.4 | -19.4 | NM | NM | 18 SCFH |
| GPT-11 | 7/30/2009 | 7:20 | -0.8 | 35.2 | 1.8 | 12.1 | 51.0 | -8.8 | NM | NM | 10 SCFH |
| GPT-11 | 7/30/2009 | 18:10 | -3.6 | 70.6 | 3.3 | 0.4 | 25.9 | -15.2 | NM | NM | 9 SCFH |
| GPT-11 | 7/31/2009 | 7:30 | -0.9 | 73.1 | 3.7 | 0.0 | 23.3 | -7.1 | NM | NM | 10 SCFH |
| GPT-11 | 7/31/2009 | 17:04 | -4.5 | 70.3 | 3.3 | 0.3 | 26.1 | -13.4 | NM | NM | 9 SCFH |
| GPT-11 | 8/1/2009 | 8:50 | 0.0 | 71.5 | 3.6 | 0.2 | 24.7 | -6.6 | NM | NM | 4 SCFH |
| GPT-11 | 8/1/2009 | 16:25 | -1.4 | 71.5 | 3.4 | 0.0 | 25.1 | -11.6 | NM | NM | 4 SCFH |
| GPT-11 | 8/2/2009 | 8:46 | -0.3 | 71.9 | 3.6 | 0.0 | 24.5 | -9.4 | NM | NM | 4 SCFH |
| GPT-11 | 8/2/2009 | 17:18 | -1.2 | 68.6 | 3.3 | 0.0 | 28.1 | -13.1 | NM | NM | 4 SCFH |
| GPT-11 | 8/3/2009 | 7:24 | 0.6 | 71.7 | 3.5 | 0.0 | 24.8 | -6.4 | NM | NM | 4 SCFH |
| GPT-11 | 8/3/2009 | 17:06 | -0.9 | 68.6 | 3.4 | 0.0 | 28.0 | -12.8 | NM | NM | 4 SCFH |
| GPT-11 | 8/4/2009 | 9:01 | 0.0 | 70.1 | 3.5 | 0.1 | 26.3 | -2.9 | NM | NM | 4 SCFH |
| GPT-11 | 8/4/2009 | 17:04 | -1.5 | 66.7 | 3.2 | 0.0 | 30.1 | -11.5 | NM | NM | 4 SCFH |

Month of June 2009

**Mallard Lake Landfill**
**Probe Readings**

Performed by
Fortistar Methane Group

| Probe I.D. | Time and Date of Reading | % LEL | % CH4 by Vol | % CO2 by Vol | % O2 by Vol | % Bal Gas by Vol | Static Pressure in Inches $H_2O$ | Comments |
|---|---|---|---|---|---|---|---|---|
| MGMP0002 | 6/18/2009 11:13 | 0.0 | 0 | 1.3 | 10.9 | 87.8 | 0 | |
| MGMP000A | 6/18/2009 10:33 | 4.0 | 0.2 | 8.4 | 9.1 | 82.3 | 0 | |
| MGMP000C | 6/18/2009 7:52 | 106.0 | 5.3 | 2.7 | 13.4 | 78.6 | -12.25 | exceeds 50% LEL |
| MGMP000D | 6/5/2009 15:07 | 700.0 | 35 | 3.4 | 0 | 61.6 | 0.32 | exceeds 50% LEL |
| MGMP000E | 6/18/2009 10:30 | 704.0 | 35.2 | 10.4 | 9.2 | 45.2 | -70.38 | exceeds 50% LEL |
| MGMP000F | 6/18/2009 9:47 | 0.0 | 0 | 0.1 | 20 | 79.9 | 0 | |
| MGMP000G | 6/18/2009 9:45 | 0.0 | 0 | 0.8 | 14.5 | 84.7 | -0.01 | |
| MGMP000H | 6/5/2009 14:35 | 1598.0 | 79.9 | 2.2 | 0 | 17.9 | 1.39 | exceeds 50% LEL |
| MGMP000J | 6/18/2009 9:39 | 0.0 | 0 | 0.6 | 19.5 | 79.9 | 0 | |
| MGMP000K | 6/18/2009 9:33 | 0.0 | 0 | 0 | 20.6 | 79.4 | 0 | |
| MGMP000L | 6/18/2009 9:50 | 0.0 | 0 | 0.1 | 20 | 79.9 | 0 | |
| MGMP000M | 6/18/2009 10:23 | 0.0 | 0 | 0.8 | 16.1 | 83.1 | 0 | |
| MGMP000N | 6/18/2009 10:26 | 0.0 | 0 | 0.2 | 19.6 | 80.2 | 0 | |
| MGMP000P | 6/18/2009 10:37 | 0.0 | 0 | 0.2 | 19.7 | 80.1 | 0 | |
| MGMP000Q | 6/18/2009 7:23 | 0.0 | 0 | 3.2 | 17.1 | 79.7 | 0 | |
| MGMP000R | 6/18/2009 7:26 | 0.0 | 0 | 1.5 | 19.7 | 78.8 | 0.02 | |
| MGMP000S | 6/18/2009 7:34 | 0.0 | 0 | 0 | 20.1 | 79.9 | 0 | |
| MGMP000U | 6/17/2009 12:43 | 22.0 | 1.1 | 0.1 | 19.3 | 79.5 | -0.89 | |
| MGMP000V | 6/22/2009 12:03 | 2.0 | 0.1 | 0.1 | 19.3 | 80.5 | 0.94 | |
| MGMP000X | 6/18/2009 8:23 | 0.0 | 0 | 0 | 20.2 | 79.8 | 0 | |
| MGMP0013 | 6/17/2009 12:51 | 0.0 | 0 | 0 | 20 | 80 | -7.06 | |
| MGMP0014 | 6/18/2009 7:56 | 980.0 | 49 | 2.2 | 4.4 | 44.4 | 0.26 | exceeds 50% LEL |
| MGMP0015 | 6/17/2009 12:46 | 0.0 | 0 | 0 | 20 | 80 | -28.07 | |
| MGMP0017 | 6/17/2009 12:41 | 2.0 | 0.1 | 3.9 | 11.7 | 84.3 | 0.05 | |
| MGMP0019 | 6/18/2009 8:19 | 0.0 | 0 | 1.4 | 18.2 | 80.4 | 0 | |
| MGMP0021 | 6/18/2009 8:29 | 0.0 | 0 | 1.7 | 18.3 | 80 | 0 | |
| MGMP0023 | 6/18/2009 9:35 | 0.0 | 0 | 2.7 | 14.8 | 82.5 | 0 | |
| MGMP002A | 6/18/2009 7:39 | 0.0 | 0 | 0.1 | 20 | 79.9 | 0 | |
| MGMP002B | 6/18/2009 7:40 | 0.0 | 0 | 0.1 | 20 | 79.9 | 0 | |
| MGMP002C | 6/5/2009 15:00 | 0.0 | 0 | 0.9 | 17.6 | 81.5 | 0 | |
| MGMP002D | 6/18/2009 7:43 | 0.0 | 0 | 5.4 | 11.6 | 83 | 0 | |
| MGMP002E | 6/18/2009 7:44 | 0.0 | 0 | 0.6 | 19.6 | 79.8 | 0 | |
| MGMP002F | 6/18/2009 7:46 | 0.0 | 0 | 0 | 19.8 | 80.2 | 0 | |
| MGMP006A | 6/18/2009 11:05 | 0.0 | 0 | 0.1 | 20.3 | 79.6 | -0.04 | |
| MGMP006B | 6/18/2009 11:08 | 1262.0 | 63.1 | 2.3 | 3.6 | 31 | 0.14 | exceeds 50% LEL |

Month of June 2009

Mallard Lake Landfill
Probe Readings

Performed by
Fortistar Methane Group

| Probe I.D. | Time and Date of Reading | % LEL | % CH4 by Vol | % CO2 by Vol | % O2 by Vol | % Bal Gas by Vol | Static Pressure in Inches $H_2O$ | Comments |
|---|---|---|---|---|---|---|---|---|
| MGMP006C | 6/18/2009 11:10 | 6.0 | 0.3 | 0 | 20.2 | 79.5 | 0.01 | |
| MGMP006D | 6/18/2009 11:11 | 0.0 | 0 | 0 | 20.3 | 79.7 | 0 | |
| MGMP007A | 6/18/2009 7:30 | 0.0 | 0 | 0.1 | 20.2 | 79.7 | 0 | |
| MGMP007B | 6/18/2009 7:31 | 0.0 | 0 | 2.6 | 17.5 | 79.9 | 0 | |
| MGMP008A | 6/18/2009 11:28 | 0.0 | 0 | 0.2 | 20.2 | 79.6 | 0.15 | |
| MGMP008B | 6/18/2009 11:29 | 0.0 | 0 | 0 | 20.3 | 79.7 | 0.06 | |
| MGMP008C | 6/18/2009 11:31 | 0.0 | 0 | 0 | 20.3 | 79.7 | 0 | |
| MGMP008D | 6/18/2009 11:32 | 0.0 | 0 | 0 | 20.4 | 79.6 | 0 | |
| MGMP008E | 6/18/2009 11:33 | 0.0 | 0 | 0 | 20.4 | 79.6 | 0 | |
| MGMP008F | 6/18/2009 11:35 | 0.0 | 0 | 0 | 20.4 | 79.6 | 0 | |
| MGMP00E1 | 6/18/2009 10:35 | 2.0 | 0.1 | 0.2 | 19.6 | 80.1 | -76.47 | |
| MGMP00ID | 6/5/2009 14:39 | 0.0 | 0 | 0 | 19.8 | 80.2 | 0 | |
| MGMP00IS | 6/5/2009 14:41 | 0.0 | 0 | 0 | 20.1 | 79.9 | -9.32 | |
| MGMP011A | 6/18/2009 11:17 | 0.0 | 0 | 0.1 | 20.1 | 79.8 | 0 | |
| MGMP011B | 6/18/2009 11:18 | 0.0 | 0 | 0.1 | 19.9 | 80 | 0 | |
| MGMP011C | 6/18/2009 11:20 | 0.0 | 0 | 0.1 | 20.3 | 79.6 | 0.02 | |
| MGMP011D | 6/18/2009 11:22 | 0.0 | 0 | 0 | 20.4 | 79.6 | 0 | |
| MGMP011E | 6/18/2009 11:23 | 0.0 | 0 | 0 | 20.4 | 79.6 | 0 | |
| MGMP016A | 6/18/2009 8:04 | 8.0 | 0.4 | 0.2 | 17.3 | 82.1 | -0.01 | |
| MGMP016B | 6/18/2009 8:06 | 2.0 | 0.1 | 0 | 19.9 | 80 | 0 | |
| MGMP016C | 6/18/2009 8:07 | 0.0 | 0 | 4.1 | 14.2 | 81.7 | 0 | |
| MGMP0GX9 | 6/18/2009 11:38 | 1406.0 | 70.3 | 28.9 | 0.5 | 0.3 | -17.14 | exceeds 50% LEL |
| MGMP0W16 | 6/18/2009 10:45 | 0.0 | 0 | 1.5 | 16.5 | 82 | 0 | |
| MGMP0W17 | 6/18/2009 10:43 | 0.0 | 0 | 1.8 | 17.2 | 81 | 0 | |
| MGMP0W18 | 6/18/2009 10:41 | 0.0 | 0 | 0 | 19.9 | 80.1 | 0 | |
| MGPT0004 | 6/5/2009 15:20 | 0.0 | 0 | 0.1 | 19.7 | 80.2 | 0 | |
| MGPT0005 | 6/5/2009 15:25 | 0.0 | 0 | 0.2 | 19.6 | 80.2 | 0 | |
| MGPT0006 | 6/5/2009 15:27 | 0.0 | 0 | 0 | 19.9 | 80.1 | 0 | |
| MGPT0008 | 6/5/2009 15:16 | 0.0 | 0 | 1.9 | 17.8 | 80.3 | 0 | |
| MGPT0009 | 6/5/2009 15:18 | 0.0 | 0 | 0.1 | 19.8 | 80.1 | -0.43 | |
| MGPT0010 | 6/5/2009 14:45 | 0.0 | 0 | 0 | 19.8 | 80.2 | 0 | |

Seven probes > or = 50% LEL

Month of June 2009

Mallard Lake Landfill
Probe Readings

Performed by
Fortistar Methane Group

| Probe I.D. | Time and Date of Reading | % LEL | % CH4 by Vol | % CO2 by Vol | % O2 by Vol | % Bal Gas by Vol | Static Pressure in inches $H_2O$ | Comments |
|---|---|---|---|---|---|---|---|---|
| MGMP000D | 6/12/2009 9:41 | 714.0 | 35.7 | 3.5 | 0.3 | 60.5 | 0.16 | exceeds 50% LEL |
| MGMP000D | 6/17/2009 12:39 | 712.0 | 35.6 | 3.1 | 0.3 | 61 | 0.71 | exceeds 50% LEL |
| MGMP000D | 6/22/2009 12:00 | 718.0 | 35.9 | 3 | 0.3 | 60.8 | 1.76 | exceeds 50% LEL |
| MGMP000H | 6/12/2009 10:06 | 1598.0 | 79.9 | 2.2 | 0.2 | 17.7 | 0.58 | exceeds 50% LEL |
| MGMP000H | 6/17/2009 12:17 | 1616.0 | 80.8 | 1.9 | 0.2 | 17.1 | 1.13 | exceeds 50% LEL |
| MGMP000H | 6/22/2009 12:28 | 1598.0 | 79.9 | 1.8 | 0.3 | 18 | 2.78 | exceeds 50% LEL |
| MGMP002C | 6/12/2009 9:34 | 0.0 | 0 | 1.6 | 17.3 | 81.1 | 0 | |
| MGMP002C | 6/17/2009 12:54 | 0.0 | 0 | 1.3 | 17.1 | 81.6 | 0 | |
| MGMP002C | 6/22/2009 11:52 | 564.0 | 28.2 | 6.9 | 6.6 | 58.3 | 0 | exceeds 50% LEL |
| MGMP00IS | 6/12/2009 10:10 | 2.0 | 0.1 | 0 | 19.7 | 80.2 | -10.61 | |
| MGMP00IS | 6/17/2009 12:14 | 0.0 | 0 | 0 | 19.5 | 80.5 | -7.96 | |
| MGMP00IS | 6/22/2009 12:24 | 0.0 | 0 | 0 | 18.7 | 81.3 | -3.78 | |
| MGPT0004 | 6/12/2009 9:58 | 0.0 | 0 | 0.3 | 19.7 | 80 | 0 | |
| MGPT0004 | 6/17/2009 12:25 | 0.0 | 0 | 0.1 | 19.7 | 80.2 | 0 | |
| MGPT0004 | 6/22/2009 12:16 | 0.0 | 0 | 0.1 | 19 | 80.9 | 0.38 | |
| MGPT0005 | 6/12/2009 10:00 | 0.0 | 0 | 0.6 | 19.3 | 80.1 | 0 | |
| MGPT0005 | 6/17/2009 12:23 | 0.0 | 0 | 0.6 | 18.9 | 80.5 | 0.05 | |
| MGPT0005 | 6/22/2009 12:19 | 0.0 | 0 | 0.3 | 18.6 | 81.1 | 0 | |
| MGPT0006 | 6/12/2009 10:02 | 0.0 | 0 | 0 | 20 | 80 | 0 | |
| MGPT0006 | 6/17/2009 12:21 | 4.0 | 0.2 | 0 | 19.7 | 80.1 | 0 | |
| MGPT0006 | 6/22/2009 12:21 | 0.0 | 0 | 0 | 18.8 | 81.2 | 0 | |
| MGPT0008 | 6/12/2009 9:53 | 0.0 | 0 | 5.6 | 10.7 | 83.7 | 0 | |
| MGPT0008 | 6/17/2009 12:30 | 0.0 | 0 | 4.5 | 11.9 | 83.6 | 0.48 | |
| MGPT0008 | 6/22/2009 12:12 | 0.0 | 0 | 2.7 | 14.6 | 82.7 | -3.99 | |
| MGPT0009 | 6/12/2009 9:55 | 0.0 | 0 | 0.2 | 19.7 | 80.1 | -1.03 | |
| MGPT0009 | 6/17/2009 12:28 | 0.0 | 0 | 0.2 | 19.4 | 80.4 | -1.62 | |
| MGPT0009 | 6/22/2009 12:14 | 0.0 | 0 | 0.3 | 18.8 | 80.9 | 2.09 | |
| MGPT0010 | 6/12/2009 9:50 | 2.0 | 0.1 | 0.1 | 19.8 | 80 | 0 | |
| MGPT0010 | 6/17/2009 12:32 | 4.0 | 0.2 | 0.1 | 19.4 | 80.3 | 0.01 | |
| MGPT0010 | 6/22/2009 12:10 | 2.0 | 0.1 | 0 | 19.3 | 80.6 | 0 | |

One additional probe > or = 50% LEL

supplemental readings

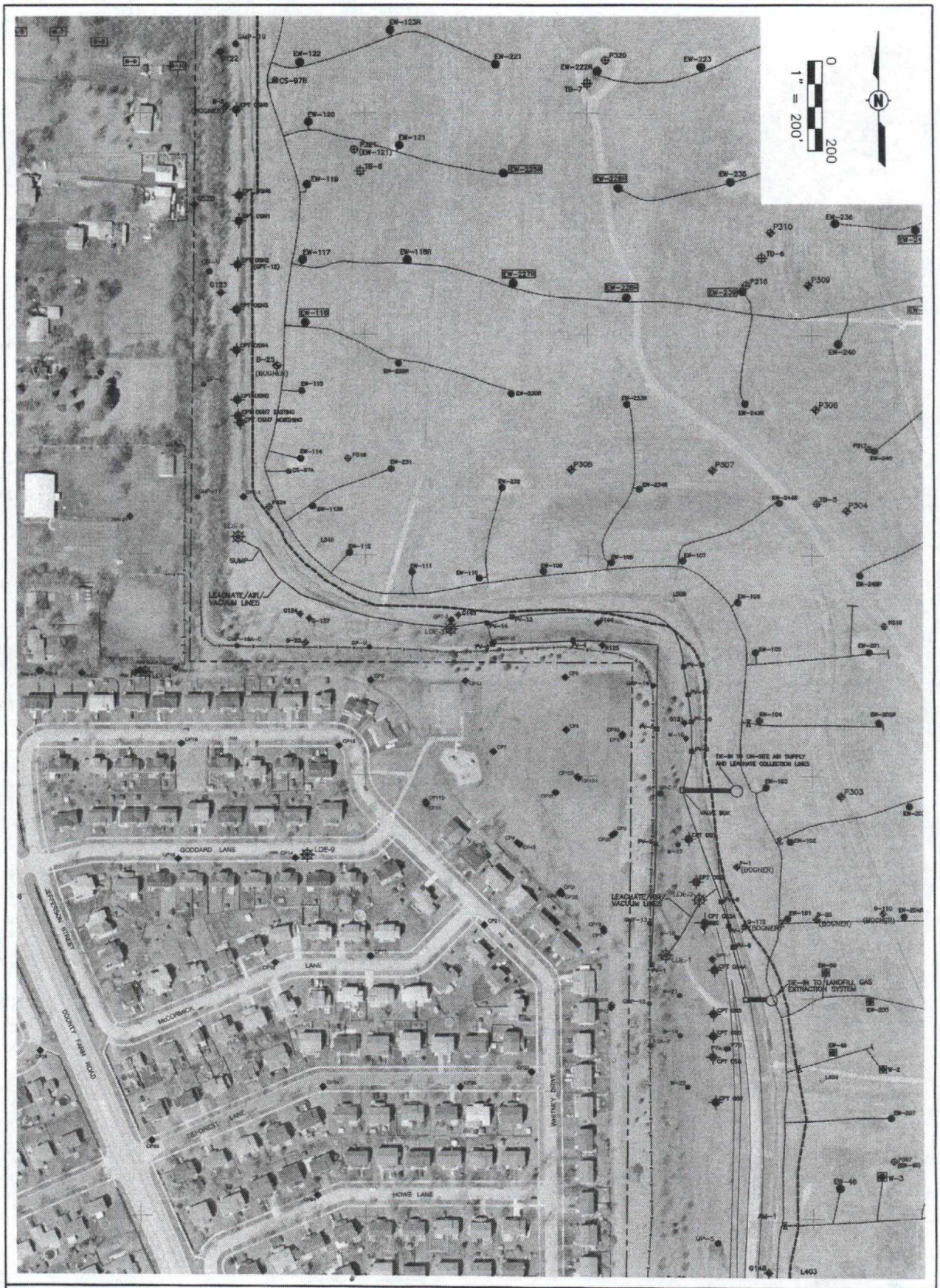
# Figures

## Figure 1 - Supplemental Work Plan On-Site Investigation Area, West Side

## Figure 2 - Supplemental Work Plan On-Site Investigation Area, South Side

## Figure 3 - Supplemental Work Plan, On-site Investigation Area, East Side

X:\PROJECTS\200704805\DWG\Base_Map.dwg; 8/7/2009 1:10:38 PM; CURTIN, KEVIN J.; STS.stb




MALLARD LAKE LANDFILL
DuPAGE COUNTY
HANOVER PARK, ILLINOIS

SUPPLEMENTAL WORK PLAN
ON-SITE INVESTIGATION AREA, WEST SIDE

| | |
|---|---|
| Drawn: | KJC 7/6/2009 |
| Checked: | MGR 7/6/2009 |
| Approved: | MGR 7/6/2009 |
| PROJECT NUMBER | 13069002 |
| FIGURE NUMBER | 1 |

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Green Bay, WI 54311
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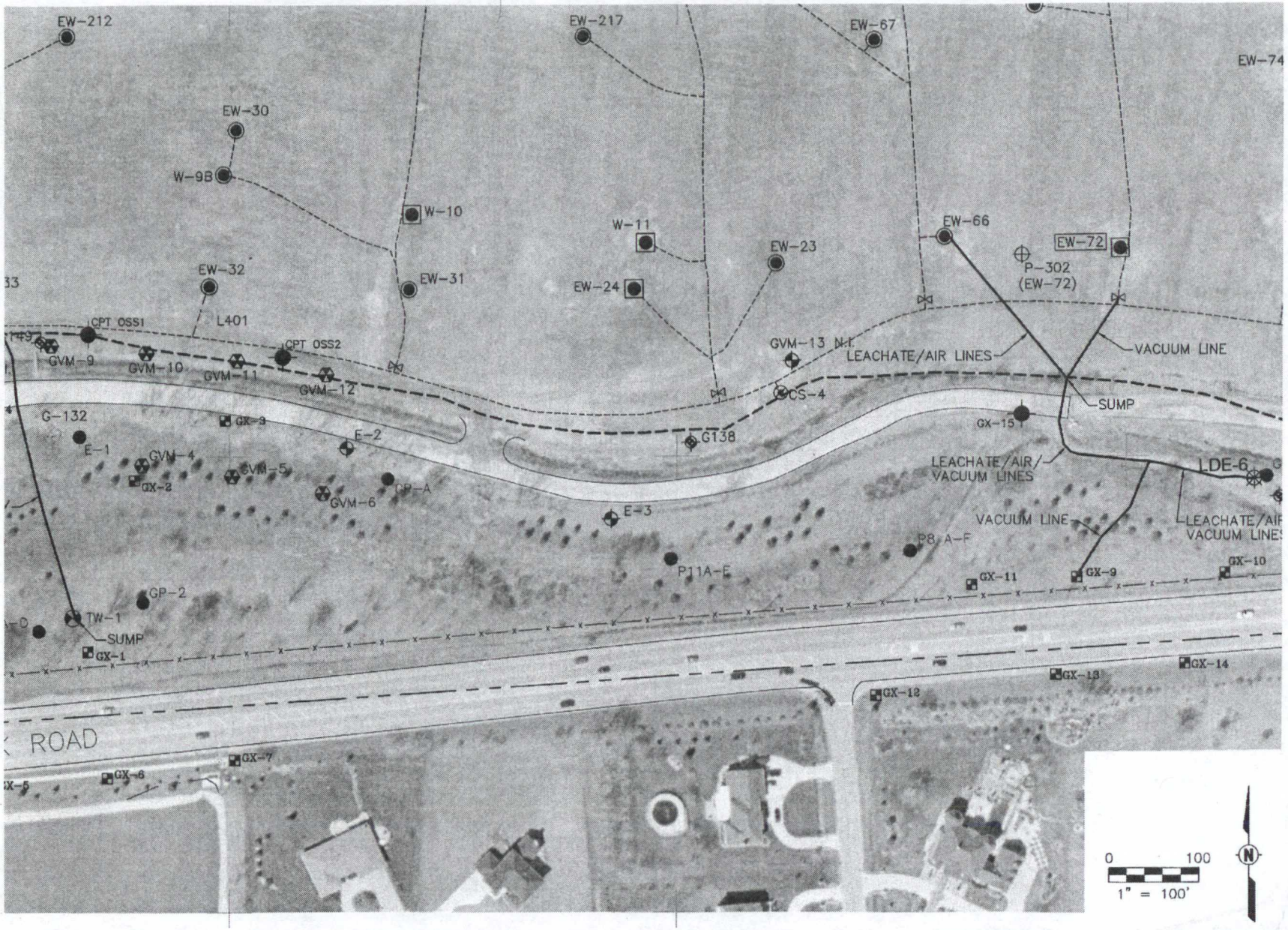


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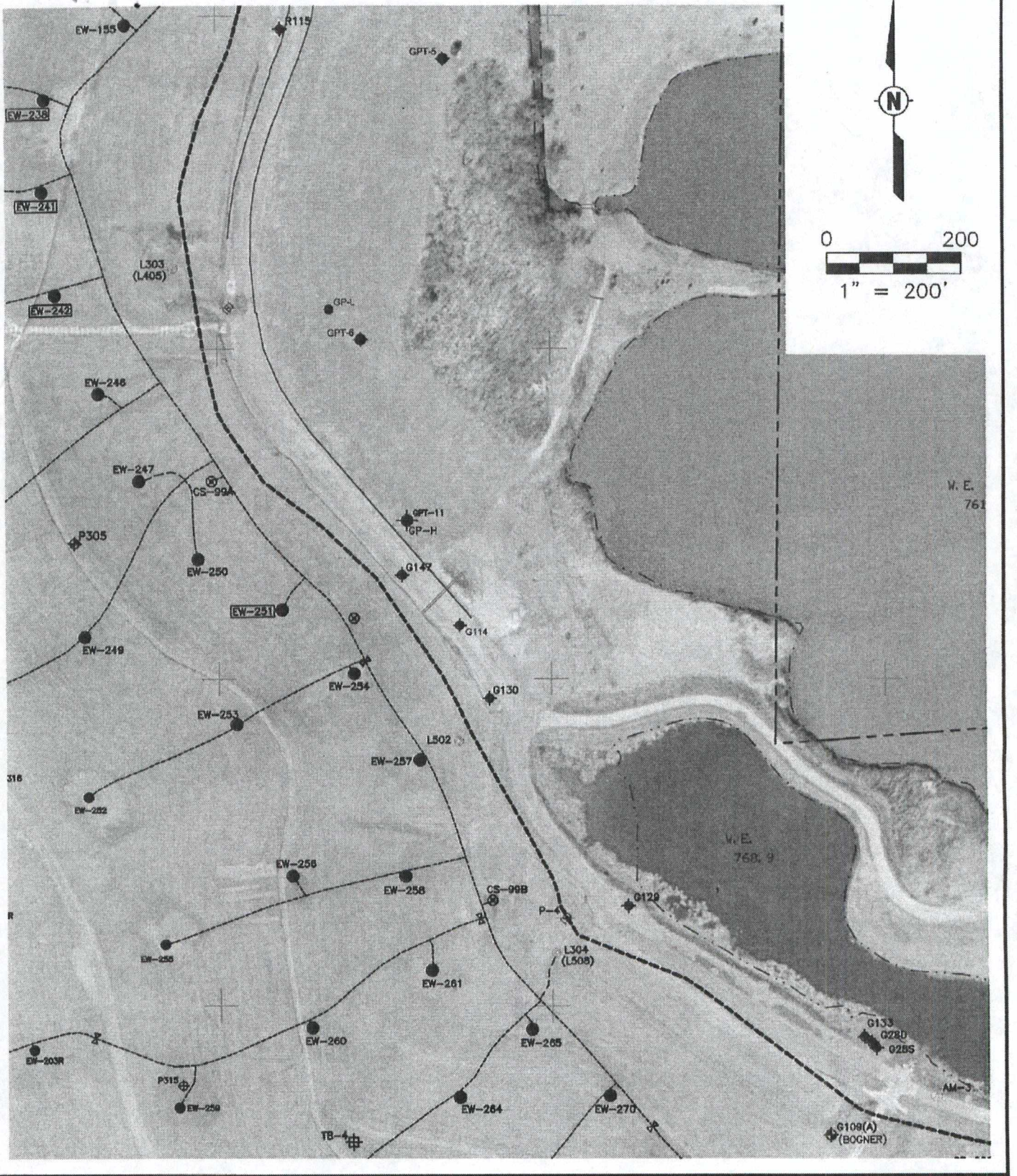
MALLARD LAKE LANDFILL
DuPAGE COUNTY
HANOVER PARK, ILLINOIS

SUPPLEMENTAL WORK PLAN
ON-SITE INVESTIGATION AREA, SOUTH SIDE

| | | |
|---|---|---|
| Drawn: | KJC | 7/6/2009 |
| Checked: | MGR | 7/6/2009 |
| Approved: | MGR | 7/6/2009 |
| PROJECT NUMBER | 13069002 | |
| FIGURE NUMBER | 2 | |

X:\PROJECTS\300704805\DWG\Base_Map.dwg; 8/5/2009 11:07:36 AM; CURTIN, KEVIN J.; STS.stb

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# MALLARD LAKE LANDFILL
## DuPAGE COUNTY
## HANOVER PARK, ILLINOIS

## SUPPLEMENTAL WORK PLAN
## ON-SITE INVESTIGATION AREA, EAST SIDE

| | | |
|---|---|---|
| Drawn : | KJC | 7/6/2009 |
| Checked: | MGR | 7/6/2009 |
| Approved: | MGR | 7/6/2009 |
| PROJECT NUMBER | 13069002 | |
| FIGURE NUMBER | 3 | |

x:\PROJECTS\200704805\DWG\Base_Map.dwg; 9/5/2009 11:09:05 AM; CURTIN, KEVIN J.; STS.stb